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HALIFAX, NOVA SCOTIA

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Vol. 32 1982 Part 1

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B.J. McAfee and D.W. Grund 1

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THE CLAVARIOID FUNGI OF NOVA SCOTIA[1]

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Detailed description of 37 species of clavarioid fungi occurring in Nova Scotia are presented. Species from the 8 genera *Clavaria* Fr., *Clavariadelphus* Donk, Clavicorona Doty, *Clavulina* Schroet., *Clavulinopsis* van Ov., *Lentaria* Corner, *Ramaria* (Fr.) Bonorden and *Ramariopsis* Donk emend. Corner are represented. A circumscription of each genus and key to its species are provided. Microscopic and macroscopic details are illustrated for all described taxa. Macrochemical tests carried out on all specimens assisted in determining taxa.

Ramaria longissimispora is described as a new species. Var. *concolor* is a new variety of *R. formosa.* Eleven species are reported as new records for the province.

On présente une description détaillée de 37 espèces de champignons du type "clavaire" présents en Nouvelle-Ecosse. Ces espèces comprennent des représentants des 8 genres suivants: *Clavaira* Fr., *Clavariadelphus* Donk, *Clavicorona* Doty, *Clavulina* Schroet., *Clavulinopsis* van Ov., *Lentaria* Corner, *Ramaria* (Fr.) Bonorden et *Ramariopsis* Donk emend. Corner. On délimite chaque genre et on fournit une clé d'identification de ses espèces. On inclut des illustrations des détails microscopiques et macroscopiques de tous les taxons décrits. Des tests macrochimiques effectués sur tous les spécimens ont aidé à l'identification des taxons.

On décrit une nouvelle espèce, *Ramaria longissimispora*, de même que var. *concolor*, une nouvelle variété de *R. formosa*. La présence dans la province de onze des espèces présentées est signalée pour la première fois.

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Introduction

The Clavariaceae, commonly known as coral fungi, are abundant in Nova Scotia in moist weather. In dry seasons only a few common species are found. An investigation carried out during the months of July through October 1977, a relatively humid season, established the presence of 40 species and varieties representing 8 genera.

The Clavariaceae are basidiomycetes bearing spores upon the surface of simple or branched coral-like structures. The erect fruiting bodies are covered with a hymenium except for the base of the stem and the upper surfaces of oblique branches. Pigmentation ranges from yellow and brilliant pink to the complete absence of color in snow white fruiting bodies, and the texture of the fruiting body varies from soft and fleshy to tough and brittle, with some species waxy, gelatinous or pliable. Spore deposits are white or colored, indicative of genera, and spores may be smooth or ornamented with spines, warts or ridges.

The comparatively mild climate (-3.2 to 18.3°C) and the considerable annual rainfall (1204.5-1340.9 mm) (Statistics Canada 1978) permits the development of a relatively rich mycoflora in Nova Scotia. A damp hollow in a mixed woods, with abundant dead wood and a deep humus layer provides an excellent habitat for the larger multibranched fruiting bodies typical of the genus *Ramaria*. The simple sporocarps characteristic of the genus *Clavulinopsis* are more often found on open grassland or mossy areas. Dead leaves and herbaceous stems and twigs provide a habitat for some of the smaller fruiting bodies. Some small, simple or sparingly branched fruiting bodies are phycophilous, growing in films of green or blue-green algae that coat the soil or surface of rotting logs. The fungal hyphae are in close association with the algal cells, sometimes connected by haustoria, though the algal cells do not enter into the construction of the fruiting body. As small groups of algal cells are sometimes killed, the relationship is considered parasitic (Corner 1950).

The genera of the Clavariaceae are cosmopolitan, each comprising temperate and tropical species. A few species such as *Clavaria zollingeri* and *Clavaria vermicularis* are widely tolerant of temperature and are reported as cosmopolitan (Corner 1950).

The clavarioid fungi are conspicuous intermediates in the phylogeny of the higher basidiomycetes (Petersen 1971). Depending on whether or not the primitive fruiting body is considered to be resupinate or a simple club, the Clavariaceae may be placed at either end of the phylogenetic scale. The clavate fruiting body was the basic character recognized by pre-Friesian authors who grouped members of Dacrymycetes, Geoglossaceae, Xylariaceae and Clavariaceae together. Fries (1821) divided the genus *Clavaria* into tribes on the basis of the morphology of the fruiting body and later on spore color (Fries 1838), a characteristic also utilized by Karsten (1879) in his description of *Clavariella*. Coker (1923) published the first extensive study of the North American Clavariaceae, following the older genera. Donk (1933) recognized a number of additional genera and Corner (1950; 1970) revised the taxonomy of the family on a world-wide basis in terms of the hyphal properties and other microscopic features of fruiting bodies, segregating over 30 genera.

Sommers (sic; 1880) published the first checklist of fungi for Nova Scotia, but did not report species of Clavariaceae; however, in subsequent lists, Somers (1881; 1882; 1886) as well as MacKay (1908; 1913) and Harrison (1927) included clavarioid species in their lists of the fleshy basidiomycetes occurring in the province. Later, a list of 48 representative species of the Clavariaceae in the

Maritime Provinces are published by Wehmeyer (1950). The North American authority on the Clavariaceae, R.H. Petersen, from the University of Tennessee, and his student P. Olexia, collected in the area in 1965 and identified herbarium material now located in the E.C. Smith Herbarium, Acadia University (ACAD).

The purpose of this paper is to provide keys and detailed technical descriptions and illustrations for the representative species of the Clavariaceae occurring in Nova Scotia. Being an initial survey in the area, it is not intended to be monographic in scope. Delimitation of taxa at the genus and family level is approached in a traditional manner following Corner (1950).

Materials and Methods

Collections of representative species of Clavariaceae were made in Hants, Kings, Queens, Richmond, Guysborough, and Annapolis counties. Specimens were wrapped in waxed paper and transported to the laboratory where spore prints and descriptions were prepared from the fresh material. A spore print was prepared by placing a portion of the sporocarp on black and on white paper in a chamber consisting of two 20 x 30-cm pyrex glass dishes, one inverted over the other. A 12-hour period in this chamber permitted even drying of the material and ensured maturation of the spores. Field notes on pertinent ecological features were recorded at the time of collection.

A 35-mm single lens reflex camera was used to photograph the fresh specimens. Photographs of minute specimens were taken with a Zeiss Tessovar photographic apparatus. Specimens were dried in a standard drying oven at 38 to 40°C. After steaming and pressing, the collections were redried, filed in 12.5 x 20-cm herbarium envelopes, and deposited in the E.C. Smith Herbarium at Acadia University. Specimens designated as M- (e.g, M-526) are from the private collection of C.D. Marr, State University College, Oneonta, New York.

Macroscopic Features

A. *Color.* As sporocarp color is considered to be an important character in delimiting taxa, base, branch and contextual colors of the specimens were routinely recorded. Physical damage to the sporocarp of some species resulted in a color change or bruise. Localized color changes or stains, generally in the region of the stipe, were observed in some species. These colors plus those of dried specimens were also noted. Color references were taken from Reinhold Color Atlas (Kornerup & Wanscher 1962). As the ISCC-NBS centroid color charts (Kelly & Judd 1955) are now considered to be the standard color reference for agaricology, the nearest color equivalents from these charts are included in parentheses.

B. *Taste and Odor.* Taste and odor are useful characters that may aid the individual taxonomist, but they must be broadly interpreted owing to their inconsistency and individual variance.

C. *Form and Consistency.* Habit, branching, presence of extensive rhizomorphs, single or multiple stipe, and presence of a basal tomentum were considered as important characters of form. Consistency is a measure of the total combination of numerous hyphal characteristics and was recorded from both dry and fresh material.

Macrochemical Tests

Transverse sections about 2 mm thick, taken from approximately the second or third internode behind the terminal branch, were placed in a standard porcelain spot dish depression. One or 2 drops of the chemical solution were applied to each branch section. Color reactions were recorded as positive or negative approximately 30 minutes after application. All tests were carried out on fresh material.

A. *Ferric sulfate*—10% solution. Any shade between blue and green is considered positive.

B. *Pyrogallol (Pyrogallic Acid)*—10% aqueous solution. Positive color reactions vary from orange-yellow to carrot red or orange-brown.

C. *α-Napthol*—5% solution, made by dissolving 10 g of α-naphthol crystals in 70 ml of 95% ethanol (ETOH) and adding water to make a final volume of 200 ml. Violet and purple are positive color reactions.

D. *Guaiac tincture*—below saturation. Some shade of blue, usually dark blue, is a positive reaction.

E. *Guaiacol*—saturated aqueous solution. Pink, red, and rust brown are positive color reactions.

F. *Phenol*—2% aqueous solution. Red or violet is a positive color reaction.

G. *Aniline*—1:1 (v/v) aniline oil and water, the aqueous phase being the testing reagent. Red or violet or occasionally green is a positive color reaction.

H. *Melzer's reagent*—The reagent was prepared by dissolving 1.5 g potassium iodide (KI) in a solution of 0.5 g iodine (I_2) in 20 ml of 1:1 w/v chloral hydrate in water. A dull violet color is an amyloid reaction, a red color is dextrinoid and no color change is non-amyloid.

Microscopic Features

Microscopic observations were made from dried specimens. A small segment (2-3 cm) of the stipe or branches was rehydrated by placing in 95% ETOH for 1 minute, then in distilled water until the tissue was pliable. Freehand sections made with a razor blade, and crush mounts in 3% KOH, Melzer's reagent, or a mixture of 1% aqueous solution of Congo Red and phloxine, were examined for hyphal arrangement, presence or absence of clamps, thickness of the hymenium and subhymenium, presence of gloeoplerous hyphae, and measurements of spores, basidia, cystidia, hyphae and hyphal wall thicknesses. Camera lucida drawings of the spores, basidia, clamps, and cystidia were prepared. Spores from spore prints were coated with gold vapor and examined and photographed with a JEOL scanning electron microscope (JXA - 35) at a beam voltage of 15 kV.

A. *Spores.* Spore morphology, dimensions, and ornamentation were of primary importance in delimiting taxa. Spore measurements included ornamentation but not the apiculus.

B. *Clamps.* The presence or absence of clamps was considered to be a significant taxonomic character. Although variation in clamp morphology is not used as a species characteristic, it was routinely noted and may eventually have taxonomic value.

C. *Context.* The bulk of the context is composed of generative hyphae, which are thin-or thick-walled, septate, and may be clamped or clampless. All other types of hyphae arise from these generative hyphae. Skeletal hyphae, most easily located in the rhizomorphs, have thick walls, lack clamps or crosswalls, and are seldom branched. Gloeoplerous hyphae are recognized by their oily contents, few branches, and greater contortions than the surrounding hyphae.

Key to the Genera

1. Without gloeocystidia 2
1. With gloeocystidia; fruiting bodies simple or with pyxidate branching, mostly lignicolous; hyphae clamped, inflating or not; spores white, small, aguttate . . . . *Clavicorona* p. 15
2. Spores white 3
2. Spores colored (yellowish, ochraceous, brownish), smooth or variously roughened, ellipsoid, often elongate; fruiting bodies branched, often highly colored . . . . *Ramaria* p. 33
3. Mostly terrestrial 4
3. Lignicolous or epiphytic; fruiting bodies white, pallid, tan, ochraceous or brownish, tough, branched, sometimes simple; spores white or pale yellow, smooth, narrowly ellipsoid; hyphae becoming thick-walled . . . *Lentaria* p. 31
4. Fruiting bodies simple, large, erect, massive, yellow brown, rufescent, umber or tinged pink or violet, fleshy-spongy, firm or rigid; spores aguttate; hyphae usually clamped and inflating; lignicolous or terrestrial . . . . *Clavariadelphus* p. 12
4. Fruiting bodies branched or simple, fleshy or brittle; hyphae inflating; spores mostly 1-guttate or multiguttate; mostly terrestrial 5
5. Fruit-bodies simple or with radial, flattened or cristate branching; basidia subcylindrical, 2-spored . . . . *Clavulina* p. 16
5. Fruiting bodies simple or branched, never flattened or cristate; basidia clavate, mostly 4-spored 6
6. Fruit-bodies simple or branched; spores smooth 7
6. Fruiting bodies branched; hyphae clamped; spores mostly 1-guttate, minutely echinulate or asperulate . . . . *Ramariopsis* p. 69
7. Flesh brittle; hyphae without clamps; spores aguttate or multiguttate; fruiting bodies branched or simple . . . . *Clavaria* p. 6
7. Fleshy or somewhat brittle; hyphae clamped; spores mostly 1-guttate; fruiting bodies branched or simple, often yellow, orange, pink or red. . . . . *Clavulinopsis* p. 21

Circumscription of the Genus Clavaria

Clavaria Fr. s. str., Syst. Mycol. 1: 466, 1821.
Holocoryne Bon., Handb. Myk., 166, 1851; emend. Donk (1933).

Type Species: *C. vermicularis* Fr., Syst. Mycol. 1: 484, 1821.

Originally, the genus *Clavaria* was the receptacle for all clavarioid basidiomycetes. Holmskjold (1790), in proposing the genus *Ramaria,* confined *Clavaria* to simple, club-shaped species. Persoon (1822) recognized only the genus *Clavaria,* dividing the species into 4 groups: a) branched or coral-like; b) elongated clubs, thickened, obsoletely branched; c) simple, the club not divided; d) Typhulae: firm, furnished with distinct and elongated stems.

Fries (1821), in arranging the species of *Clavaria,* introduced the following subheadings: a) *Ramaria*—branched species, subdivided into white-spored and ochre-spored, placing *C. flava* and *C. botrytis* in the white-spored group in error; b) *Syncoryne*—simple but bases fasciculate, subconnate, cespitose; c) *Holocoryne*—simple, clavate, bases discrete.

Bonorden (1851) removed the Friesian subgenera *Ramaria* and *Holocoryne,* leaving *Syncoryne.* This subgenus included *C. fusiformis, C. fumosa* and *C. vermicularis.* Donk (1933) chose *C. vermicularis* as lectotype, which was accepted by

Konrad and Maublanc (1937). Corner (1950; 1970) reduced the species of *Clavaria* from 500 to 24 certain, 16 possible and 22 incertae sedis.

Holocoryne Bon. was the Friesian subgenus raised to generic rank without explanation or indication of a type. Donk (1933) typified *Holocoryne* with *C. acuta* and its synonym *C. fulcata*, reducing the genus to a synonym of *Clavaria*.

Corner (1950; 1970) has retained and emended the two Friesian subgenera *Syncoryne* and *Holocoryne* with *C. vermicularis* and *C. acuta* respectively as their lectotypes. The basis of the separation is the wide, loop-like clamps at the bases of the basidia in *Holocoryne*. *Syncoryne* does not have clamps on the basidia or on any hyphae of the fruit-body.

The description of the genus *Clavaria* as conceived by Corner (1950; 1970) is as follows: Fruit-bodies generally simple, often cespitose, brittle; white, pink, reddish, purple, violet, grey or brown, rarely yellow; hymenium extending over the growing apices. Spores white or pink, generally smooth, subglobose to cylindric-ellipsoid, thin-walled, generally aguttate or finely granular-guttate, rarely 1-guttate. Basidia mostly 4-spored. Hyphae thin-walled, inflating, without clamps.

Key to the Species of *Clavaria*

1. Fruiting bodies simple 2

1. Fruiting bodies branched, dull violet; spores 5.0-6.5 x 2.5-4.5 μm, broadly ellipsoid, flattened on one side . . . . *C. zollingeri* p. 11

2. Fruiting bodies greyish orange 3

2. Fruiting bodies white, yellowish or brownish towards tips, fasciculate; spores 4-6 x 3 μm, ovate to pip-shaped, apiculate . . . . *C. vermicularis* p. 11

3. Abundant cystidia projecting beyond the hymenial layer; spores 5.0-8.0 x 3.0-4.5 μm, ellipsoid, slightly apiculate; tips of fruiting bodies grey-brown . . . . *C. purpurea* p. 8

3. Cystidia absent; spores 4.5-8.0 x 2.5-4.0 μm, ovate to pip-shaped; tips of fruiting bodies dark brown . . . . *C. fumosa* p. 7

Clavaria fumosa Fr.

Syst. Mycol. 1: 483, 1821.

fumosa (L)—smoky

Figs 1, 2, 3

Fructifications: Simple, densely cespitose, often fused at the base, cylindric then subclavate, becoming fusiform, often twisted and furrowed, hollow, 2-12 cm tall; apices acute or blunt, becoming dark brown—6F8 (deep brown—56) and shrunken with age, greyish orange—5B3 (light orange—52), drying sand—4B3 (pale orange yellow—73). Context friable. Stem indistinct; base white, mycelioid. Taste mild. Odor rancid. Spore deposit white. Terrestrial, common in mixed woods, among grass in fields, or on shaded lawns.

Macrochemical Tests: Positive color changes in pyrogallol, guaiacol, 2% phenol.

Microscopic Structures: Spores hyaline, smooth, ovate to pip-shaped, apiculate, aguttate or with granular contents, 4.5-8.0 x 2.5-4.0 μm, mostly 5-6 x 3.5 μm. Basidia 30-45 μm; sterigmata 2 or 4, 4-5 μm long. Hymenium 35-45 μm thick, subhymenium 10-20 μm. Contextual hyphae 3-5 μm, inflating to 20 μm, interwoven; subhymenial hyphae 3-4 μm; gloeoplerous hyphae 4-8 μm. Clamps absent.

Collections Examined: ACAD 12871, 4/8/77, Nicholsville, Kings Co.; ACAD 12872, 12/8/77, Comeau lawn, Kentville, Kings Co.; ACAD 12873, 15/8/77, Scots Bay, Kings Co.; ACAD 12874, 25/8/77, Nicholsville, Kings Co.

Discussion: Clavaria fumosa has been described as a large color variety of *C. vermicularis* (Corner 1950). Although the 2 are similar in habit and texture, *C. fumosa* can be distinguished by its larger average size, smoky grey color and the dark brown withered tips. No odor was previously reported, but a rancid odor was obvious in all collections studied.

Clavaria purpurea Fr.

Syst. Mycol. 1: 480, 1821.

Clavaria nebulosa Pk., Bull. Torrey Bot. Club 25: 326, 1898.
Clavaria fumosa Kauffm., Pap. Mich. Acad. Sci. Arts Lett. 1: 124, 1923.
Clavaria fumosoides Kauffm., Pap. Mich. Acad. Sci. Arts Lett. 8: 145, 1928.
Clavaria occidentalis Zeller, Mycologia 21: 97, 1929.
Clavaria purpurea var. *australis* Coker, J. Elisha Mitchell Sci. Soc. 63: 63, 1947.

purpurea (L)—purple

Figs 4, 5

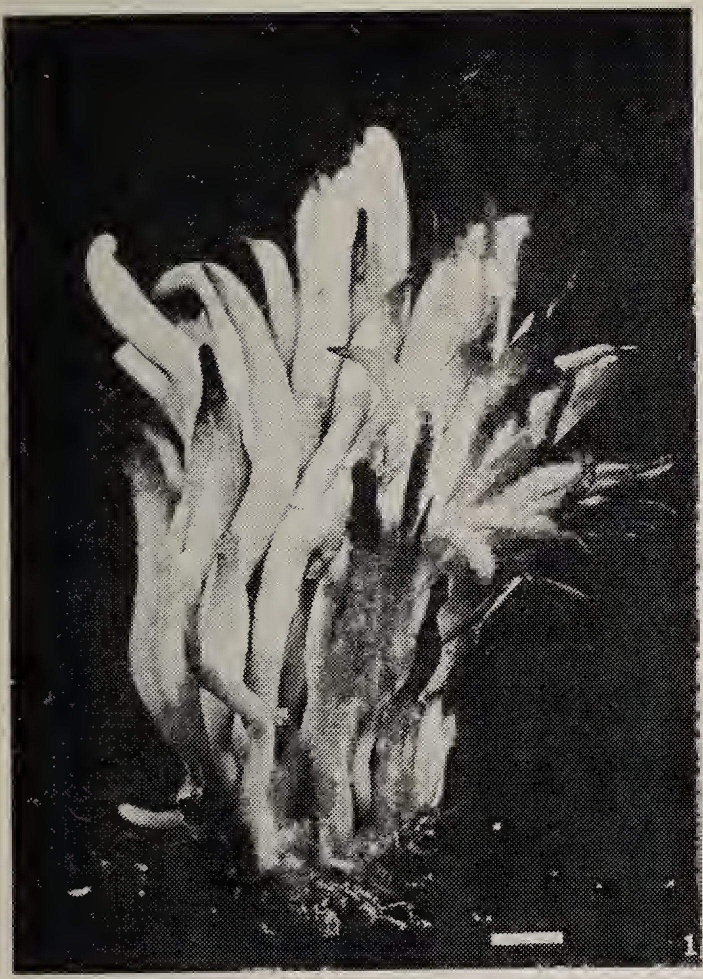
Fructifications: Simple, gregarious, solitary or cespitose, cylindrical and slender becoming fusiform, 3-12 x 0.3-0.5 cm, orange grey—5B2 (light greyish yellowish—79), greyish yellow—3C3 (light greyish olive—109) upon drying, smooth, dull, glaucous in places, tips soon withering and becoming grey brown—6E3 (greyish brown—61). Context white, brittle, becoming hollow. Stem indistinct, arising from a white woolly basal tomentum. Taste and odor absent. Spore deposit white. Terrestrial, under conifers *(Picea glauca, Abies balsamea).*

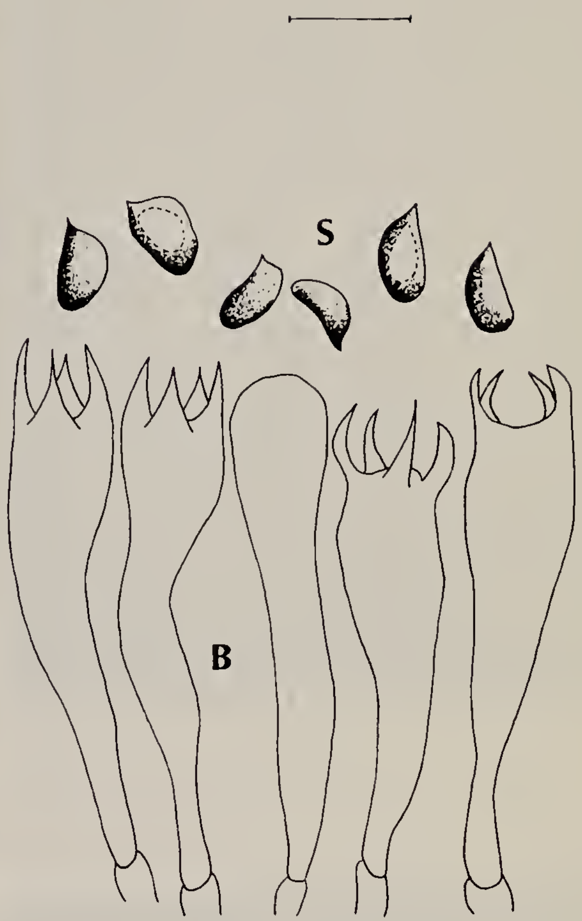
Macrochemical Tests: No significant color reactions in $FeSO_4$, pyrogallol, α-naphthol, guaiac tincture, guaiacol, or aniline. A faint pink reaction was observed with 2% phenol.

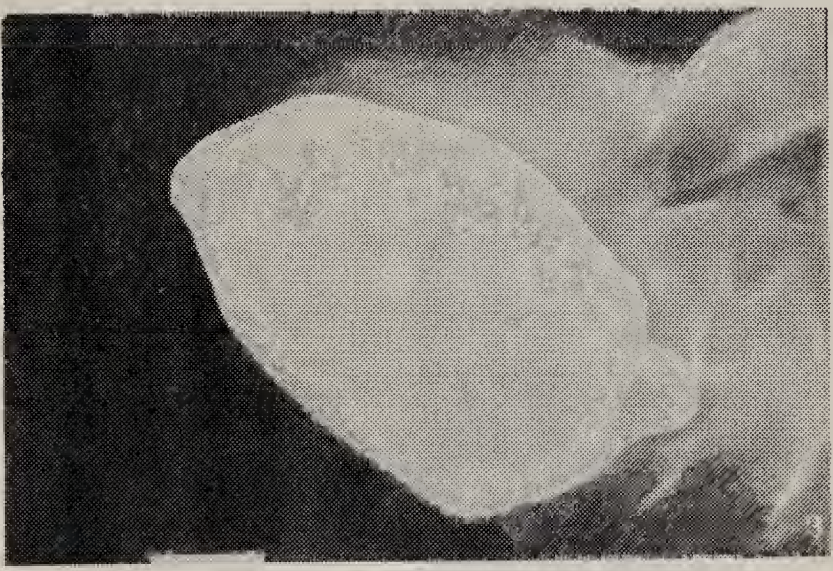
Microscopic Structures: Spores hyaline, smooth, ellipsoid, slightly apiculate, often inequilateral or curved, 5-8 x 3-4.5 µm. Basidia 30-35 x 5-6 µm, with 4 sterigmata 3-5 µm long. Cystidia 65-90 x 8-11 µm, cylindric, thin-walled, projecting beyond the hymenium, colorless, abundant. Hymenium 40-50 µm thick. Contextual hyphae 4-15 µm wide, closely packed, parallel; subhymenial hyphae 3-6 µm wide. Clamp connections absent.

Collections Examined: ACAD 12875, 15/8/77, Scots Bay, Kings Co.; ACAD 5076, 13/09/62, Boularderie, Victoria Co.; ACAD 5016, 1/10/55 Glenmont, Kings Co.

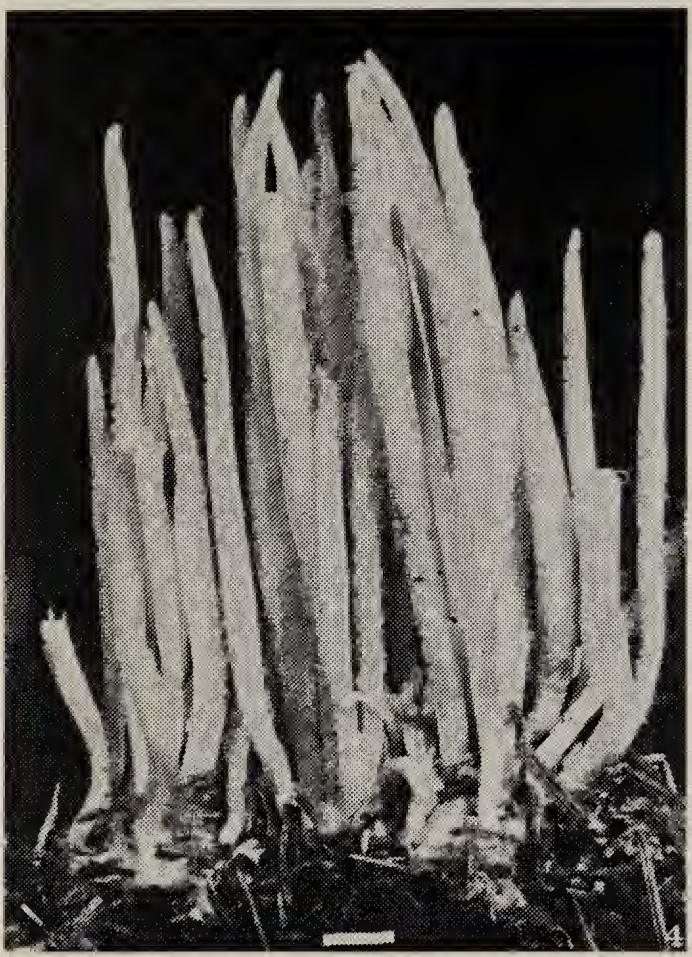
Discussion: Clavaria purpurea is a rare species (Corner 1950). Collection 12875 was found under spruce, beside *C. fumosa* from which it is indistinguishable in the field. The abundant cystidia projecting beyond the hymenium readily separate the 2 species microscopically. Coker (1923) reported a few clamp connections but none was observed in the material studied.

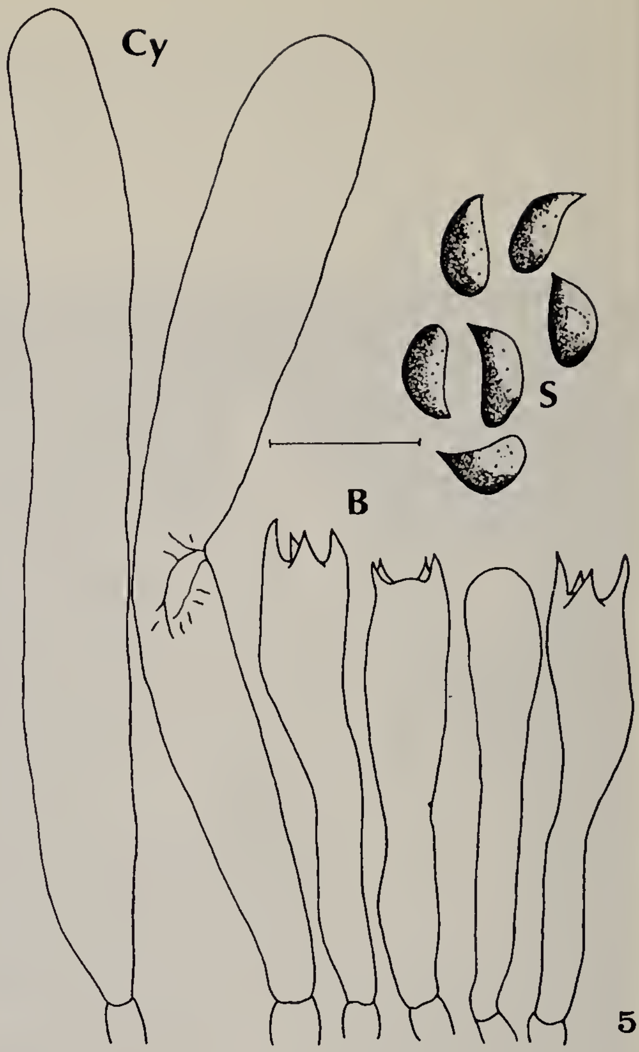




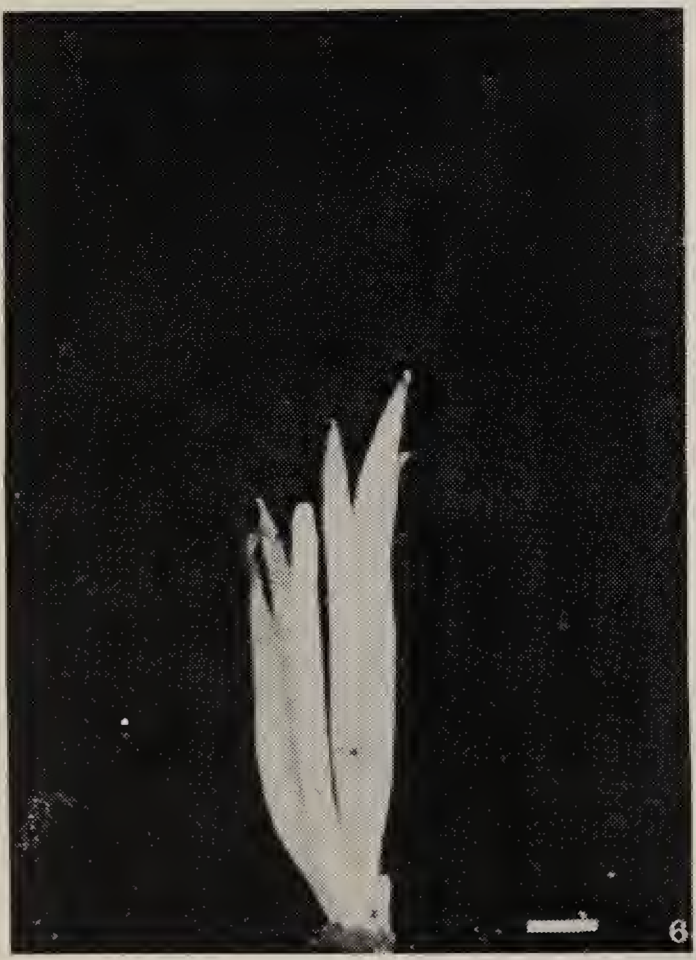


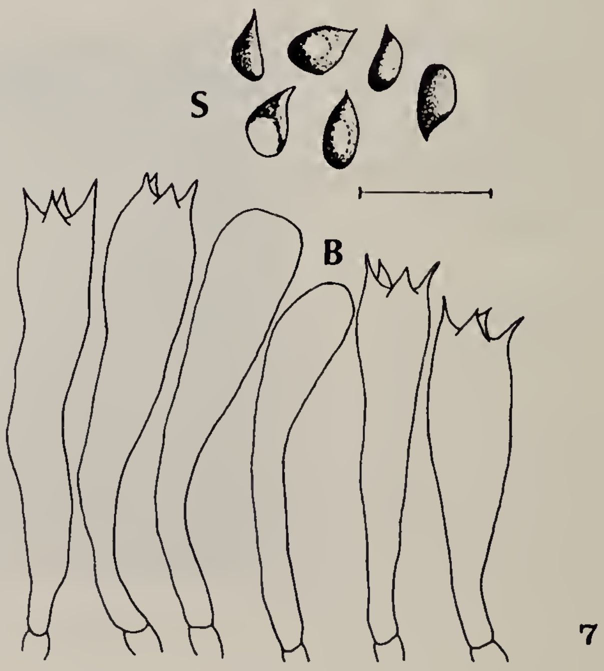
Figs 1, 2, 3. *Clavaria fumosa.*





Figs 4, 5. *Clavaria purpurea.*





Figs 6, 7. *Clavaria vermicularis.*

Clavaria vermicularis Fr.

Syst. Mycol. 1: 484, 1821.

Clavaria fragilis Fr., Syst. Mycol. 1: 484, 1821.
Clavaria cylindrica S.F. Gray, Nat. Arr. Br. Pl. 1: 656, 1821.
Clavaria solida S.F. Gray, Nat. Arr. Br. Pl. 1: 626, 1821.
Clavaria alba Pers., Mycol. Eur. 1: 175, 1822.
Clavaria vermiculata Pers., Mycol. Eur. 1: 184, 1822.
Clavaria vermiculata Mich. ap. van Ov., Bull. Jard. Bot. Buitenzorg, Ser. 3, 5: 268, 1923.

vermicularis (L)—worm-shaped

Figs 6, 7

Fructifications: Simple, white throughout but usually yellowish to brownish towards the tips, drying greyish orange—6B6 (moderate orange—53), cespitose with a few scattered solitary individuals, fasciculate, 2 or 3 to more than 20 clubs per bundle, 2-7 cm tall, hygrophanous, cylindric becoming flattened, tapered, often curving at the tips, apices acute. Context smooth, solid then becoming hollow, fragile. Taste mild. Odor absent. Spore deposit white. Terrestrial, among grass or humus in fields or mixed woods.

Macrochemical Tests: No significant color reactions with any reagent.

Microscopic Structures: Spores hyaline, smooth, ovate to pip-shaped, apiculate, 4-6 x 3 μm. Basidia 25 x 4-6 μm, with 4 sterigmata 3-5 μm long. Hymenium 30-35 μm thick, subhymenium 10-20 μm. Contextual hyphae 4-9 μm wide, closely packed, parallel. Subhymenial hyphae 2-3 μm wide. Clamp connections absent.

Collections Examined: ACAD 12876, 1/8/77, Harrington woods, Kings Co.; ACAD 12877, 15/8/77, Gospel Wood Road, Kings Co.

Discussion: C. vermicularis is a common and cosmopolitan species (Corner 1950), and is the type species of the genus. The pure white color, the fasciculate growth habit, and the fragile, watery flesh are the distinguishing field characteristics. The species has often been misnamed *C. vermiculata* but this name is pre-Friesian and invalid (Corner 1950).

Clavaria zollingeri Lev.

Ann. Sci. Nat. Ser. 3,5: 155, 1846.

Clavaria amethystina Zoll. Geneesk. Arch. Neerl. Ind. 1: 381, 1844.
Clavaria Nymaniana P. Henn., Monsunia 1: 9, 1900.
Clavaria bicolor Mass., Kew Bull., 54, 1901.
Clavaria lavendula Pk., Bull. N.Y. State Mus. 139: 47, 1910.
Clavaria rosalana Petch., Annu. Rep. Bot. Gard. Peradeniya 7: 290, 1922.
Clavaria violacea Petch., Annu. Rep. Bot. Gard. Peradeniya 9: 332, 1925.

zollingeri—after Zollinger, Dutch mycologist who named the synonym *C. amethystina.*

Figs 8, 9

Fructifications: Cespitose, solitary or gregarious, 2.0-6.5 cm tall, cylindric, sparingly branched, rugose; apices rounded or blunt; hygrophanous, dull violet—17D3 (greyish purple—228), cinnamon brown—6E6 (moderate brown—58) upon drying. Stem 0.5-2.5 cm, grey (14D1), base mycelioid, velvetlike, context white, friable. Odor absent. Taste of tallow. Spore deposit white. Terrestrial, in mixed woods or under trees in open places.

Macrochemical Tests: No significant color reaction in $FeSO_4$. Positive reactions were observed with pyrogallol, guaiac tincture, 2% phenol. No distinct color change but a fading of color was observed with α-naphthol, guaiacol, aniline.

Microscopic Structures: Spores 5-6.5 x 2.5-4.5 μm, hyaline, smooth, ovoid or broadly ellipsoid, flattened on one side, aguttate, apiculus 0.5-1.0 μm. Basidia 29-50 x 4.5-6.0 μm, 2 or 4 sterigmata 3.5-5.0 μm long. Hymenium 40 μm, thickening to 80 μm; subhymenium 20-30 μm. Contextual hyphae 4-7 μm broad, inflating to 15 μm, constricted at the septa, walls slightly thickened. Clamp connections absent.

Collections Examined: ACAD 12878, 18/81/77, cemetery, Lequille, Annapolis Co.

Discussion: Clavaria zollingeri is an uncommon and variable species. The sparse branching habit and the violet color easily distinguish this species in the field.

Circumscription of the Genus Clavariadelphus

Clavariadelphus Donk, Rev. Niederl. Homobas., Aphyll. 2: 72, 1933.
Type species: *C. pistillaris* (Fr.) Donk, Rev. Niederl. Homobas., Aphyll. 2: 73, 1933.

Donk (1933) proposed the genus *Clavariadelphus* for *Clavaria pistillaris, C. ligula* and *C. truncata.* Corner (1950) included *C. fistulosa, C. juncea* and *Craterellus unicolor.* Fries (1974) had placed *C. pistillaris, C. ligula, C. fistulosa* and *C. juncea* in *Clavaria* subgenus *Holocoryne.* Corner (1970) expanded the genus, distinguished by the unbranched habit, the ellipsoid, smooth, white or pale yellowish or brownish aguttate spores, and monomitic clamped hyphae, to include 9 additional species. He has pointed out the unique range in this group from the agaric to the typhuloid form.

Petersen (1972), finding *C. fistulosus* to be a discordant element in *Clavariadelphus*, proposed the genus *Macrotyphula* to accommodate and separate this species.

The following is Corner's description of the genus: Fruit-bodies typically solitary, filiform to clavate, ligulate or turbinate, in some species truncate and sterile at the expanded apex; light yellow or light ochraceous at first, becoming deep ochraceous, brown, rufescent or ferruginous; flesh rather firm; hymenium thickening. Spores white or pale yellowish, smooth, elongate-ellipsoid, contents finely granular-guttate. Hyphae monomitic with clamp connections, inflating, thin-walled, not secondarily septate.

The genus is north-temperate, consisting of 9 species.

Clavariadelphus pistillaris (Fr.) Donk

Rev. Niederl. Homobas., Aphyll. 2: 73, 1933.

var. americanus Corner

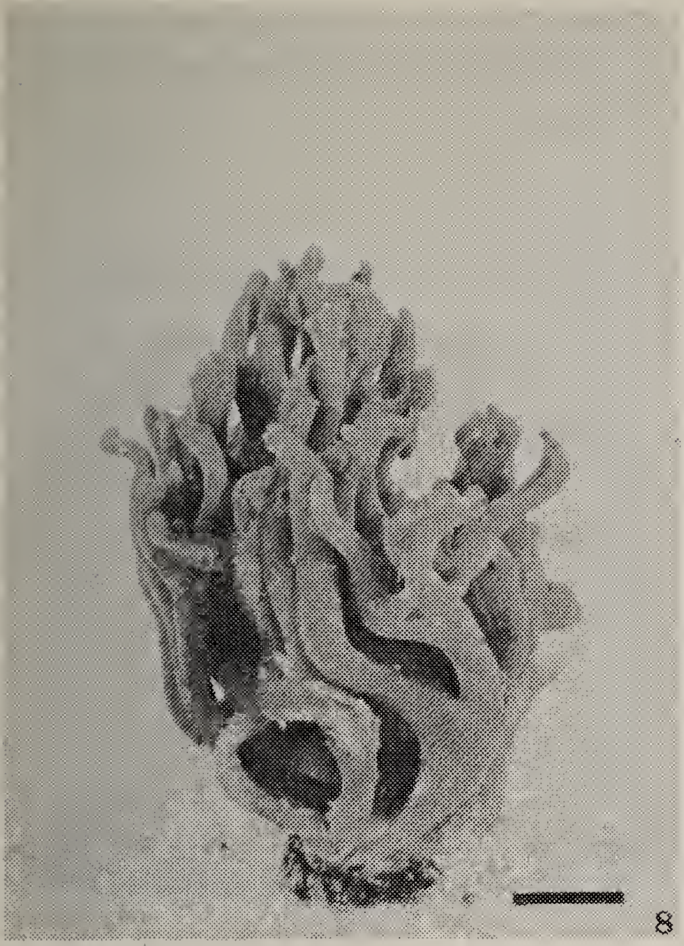
Ann. Bot. Mem. 1: 280, 1950.

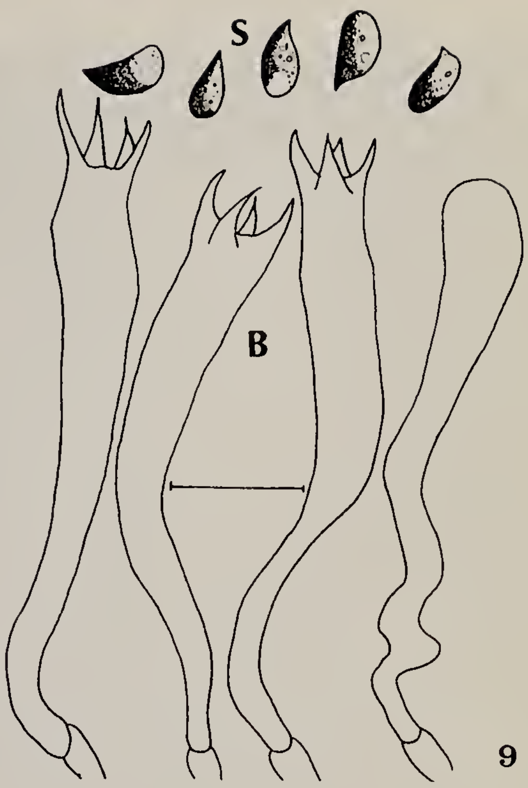
Clavaria pistillaris sensu Harper, J. Mycol. 5: 261, 1913.

pistillaris (L)— like a pestle

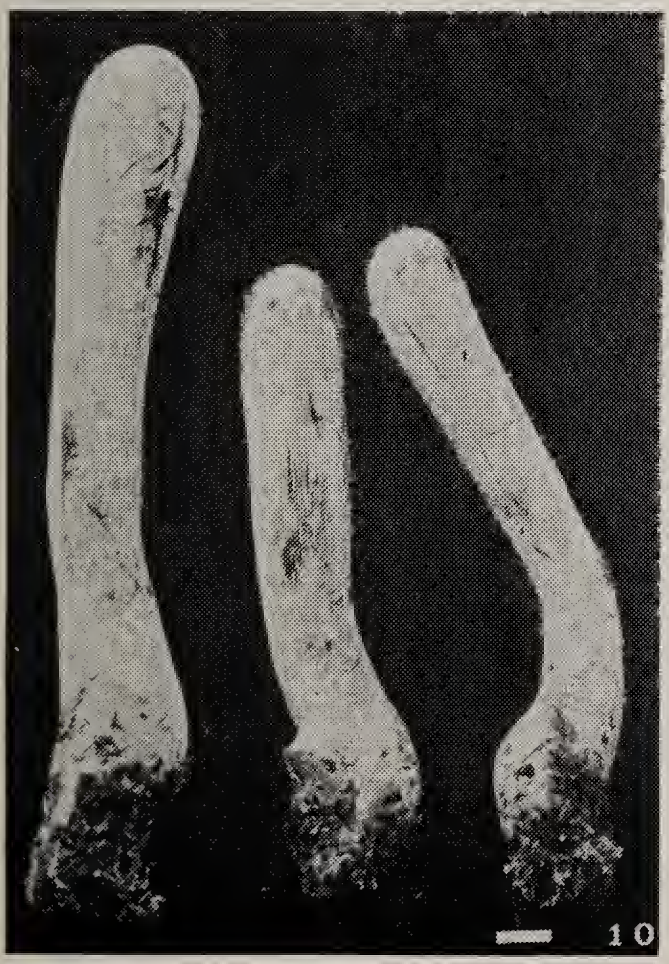
Figs 10, 11

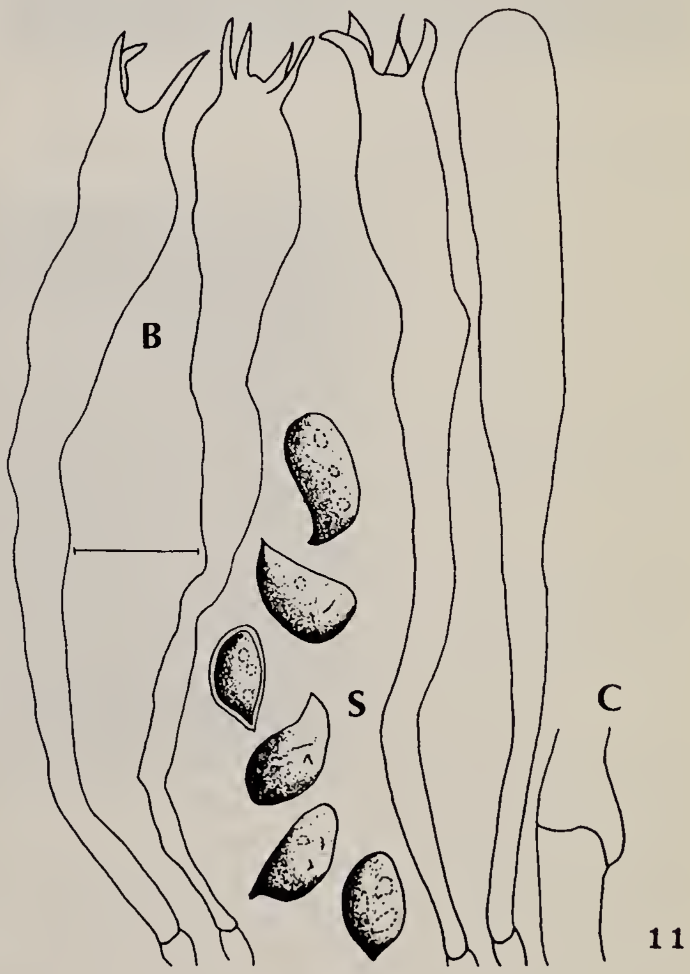
Fructifications: Simple, gregarious, occasional short-branching, strongly clavate, becoming turbinate or subtruncate, 6.0-15.0 x 0.3-3.0 cm, yellowish white—3A2



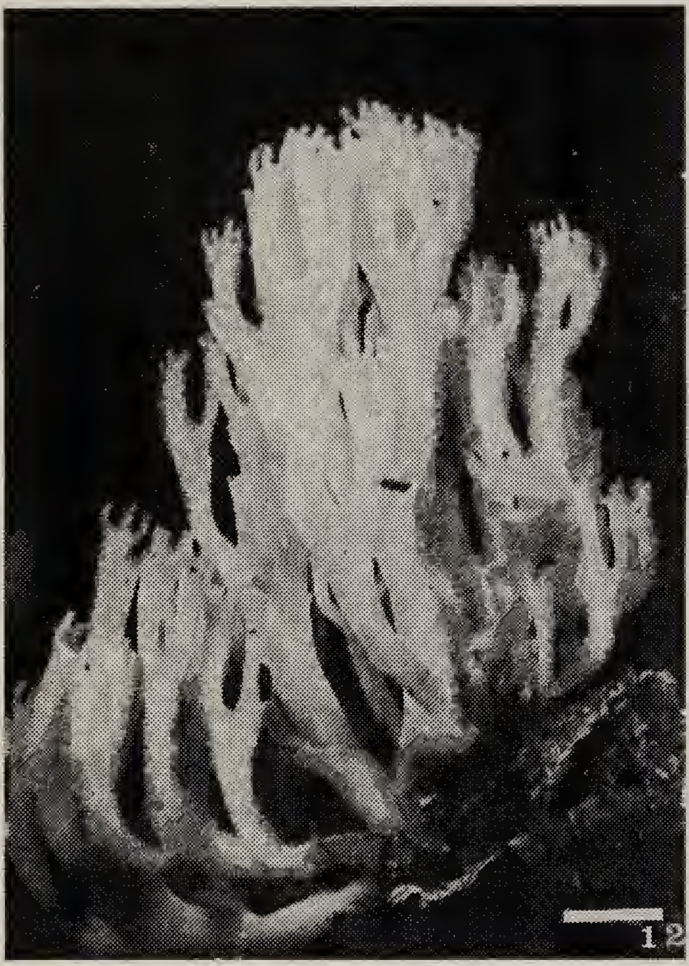


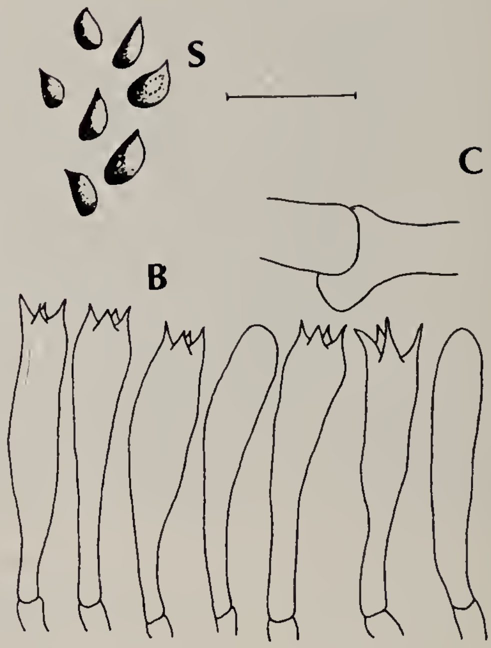
Figs 8, 9. *Clavaria zollingeri.*





Figs 10, 11. *Clavariadelphus pistillaris.*





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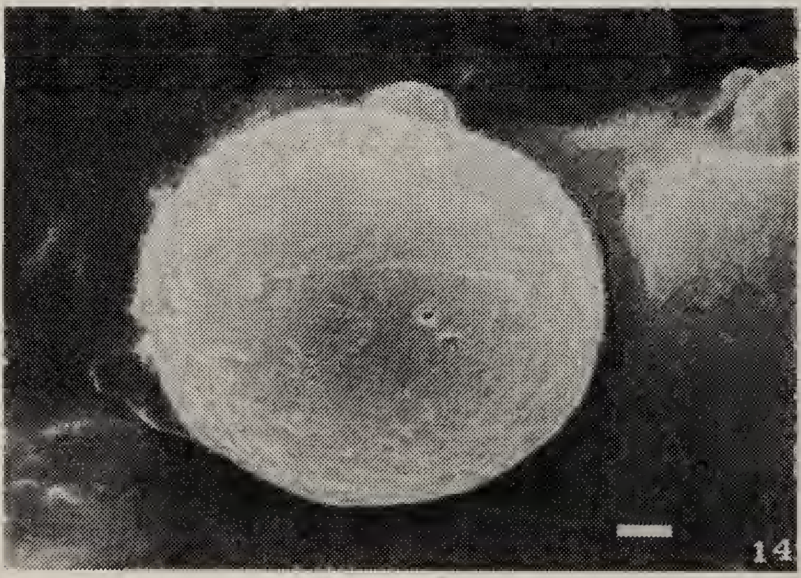


Figs 12, 13, 14. *Clavaricorona pyxidata.*

(yellowish white—92) to grey brown—8D6 (moderate reddish brown—43) when young with a flesh or rose-pink tinge, drying Madeira—8E5 (greyish reddish brown—46), smooth, becoming longitudinally rugose and hollow. Context firm, solid becoming spongy with age, turning purple-brown on cutting or bruising. Spore deposit white. Odor absent. Taste bitter. Terrestrial, in mixed or deciduous woods.

Macrochemical Tests: Significant positive color reactions in $FeSO_4$, pyrogallol, α-naphthol, guaiac tincture, guaiacol, 2% phenol, aniline.

Microscopic Structures: Spores smooth, hyaline, aguttate, variable in size, pip-shaped to oblong-ellipsoid, 6-14 x 3.5-5.0 μm. Basidia 65-100 x 5-7.5 μm, with 4 sterigmata 3-5 μm long. Hymenium thickening up to 150 μm, subhymenium 25-40 μm. Contextual hyphae 4-10 μm broad, long-celled; subhymenial hyphae 2-5 μm. Clamp connections abundant.

Collections Examined: ACAD 12879, 18/8/77, Lequille, Kings Co.; ACAD 12880, 25/8/77, Nicholsville, Kings Co.; ACAD 12881, 25/8/77, Nicholsville, Kings Co.; ACAD 12882, 31/8/77, West Gaspereau, Kings Co.

Discussion: Wells and Kempton (1968) erected *C. cokeri*, with type Coker R27 (Connecticut), as a species closely allied to *C. pistillaris* but separated from it on the basis of its pinkish coloration, smaller spores and non-vinescent flesh. It has been suggested (Wells & Kempton 1978) that the description of *C. cokeri* includes *C. pistillaris* var. *americanus*. This suggestion has been refuted by Corner (1970), and thus the name *C. pistillaris* var. *americanus* has been assigned to the ACAD collections 12879, 12880, 12881, 12882. Var. *americanus* differs from the European species in the flesh or rose-pink tinge to the hymenium and in its smaller spores. There is a wide variation in spore size. Corner (1970) has pointed out that the species is so easily recognized that insufficient attention has been given to variations in spore size.

Local collections were frequently infected with an unidentified fungal parasite.

Circumscription of the Genus Clavicorona

Clavicorona Doty, Lloydia 10: 38-44, figs 1-6, 1947.
Type species: *C. taxophila* (Thom) Doty, Lloydia 10: 38, 1947.

The genus, first published by Doty in 1947, is a natural group distinguished by the peculiar branching habit, the small white spores, clamped hyphae, and the presence of gloeocystidia.

Donk (1964) placed *Clavicorona* in Hericiaceae. Originally these fungi were classified according to the form of the fruit-body. As the fruit-body was found to be transitional, Corner (1970), using microscopic characters as the basis of his classification scheme, proposed the family Clavicoronaceae.

Corner (1950) describes the genus as follows: Fruit-body pyxidately branched, usually with a distinct stem, or simple and narrowly obconic with sterile cyathiform apex; branches verticillate, narrowly obconic with sterile cyathiform tops, proliferating whorls of 2-8, mostly 3-4, similar branchlets from the margin of the top, successive whorls more or less alternating; the lignicolous species attached by a fibrillose-strigose or subtomentose subiculum of secondary mycelium: white, light yellowish ochraceous, fuscous brown or tinged lilac, growing tips white: hymenium waxy-mucilaginous, flesh toughly gelatinous, dry and pliable or fibrous-subcoriaceous. Spores small, white, smooth, or punctate rough, ellipsoid or subglobose, thin-walled, aguttate. Basidia small, 4-spored. Cystidia present or not; gloeocystidia large, traversing the subhymenium and hymenium.

Clavicorona pyxidata (Fr.) Doty

Lloydia 10: 38-44, 1947.

Clavaria pyxidata Fr., Syst. Mycol. 1:470, 1821.
Clavaria coronata Schw., Trans. Am. Philos. Soc. ii, 4: 182, 1832.
Clavaria petersii Berk., Grevillea 2: 7, 1873.
Clavaria laetissima B., J. Linn. Soc. Bot. 18: 386, 1881.
Clavicorona coronata (Schw.) Doty, Lloydia 10: 2, 1947.

pyxidata (L)—box-shaped

Figs 12, 13, 14

Fructifications: 3-12 cm tall, gregarious, ivory—4B3 (yellowish grey—93) to ochre yellow—5C7 (dark orange yellow—72), drying greyish brown—8D2 (light brownish grey—63), pyxidately branched, 4-6 branches in a whorl, axils rounded, apices finely toothed, cup-shaped. Context white, pliable, rather tough. Stem 1.5-2.5 mm thick, covered with a dense whitish or brownish pink pubescence, arising from an amorphous base which may form a resupinate mat 1 to several centimeters wide. Spore deposit white. Taste mildly peppery, developing tardily. Odor sweet. Lignicolous, on decaying logs in mixed woods.

Macrochemical Tests: No significant color reactions in $FeSO_4$, pyrogallol, α-naphthol, guaiac tincture, guaiacol, 2% phenol, aniline.

Microscopic Structures: Spores smooth, hyaline, ovoid, pip-shaped, aguttate, 2.0-4.5 x 2.5-3.0 μm. Basidia 12-20 x 3-4 μm, with 4 sterigmata 2-3 μm long. Cystidia 20-35 x 3-6 μm, fusoid, subcylindrical, smooth, acute, thin-walled, colorless, projecting 15-20 μm beyond hymenium. Hymenium 20-30 μm, not thickening; subhymenium 10-12 μm, of small rounded cells. Contextual hyphae 6-12 μm broad, parallel, inflating, usually thin-walled but sometimes the wall thickening to 0.5-1.0 μm, subhymenial hyphae 3-4 μm. Gloeoplerous hyphae 5-10 μm in diameter, longitudinal in the subhymenium, with cylindrical rounded tips projecting into the surface of the hymenium as gloeocystidia, contents dense. Clamp connections present.

Collections Examined: ACAD 12883, 4/8/77, Nicholsville, Kings Co.; ACAD 12884, 4/8/77, Nicholsville, Kings Co., ACAD 11875, 28/6/77, Harrington woods, Kings Co.

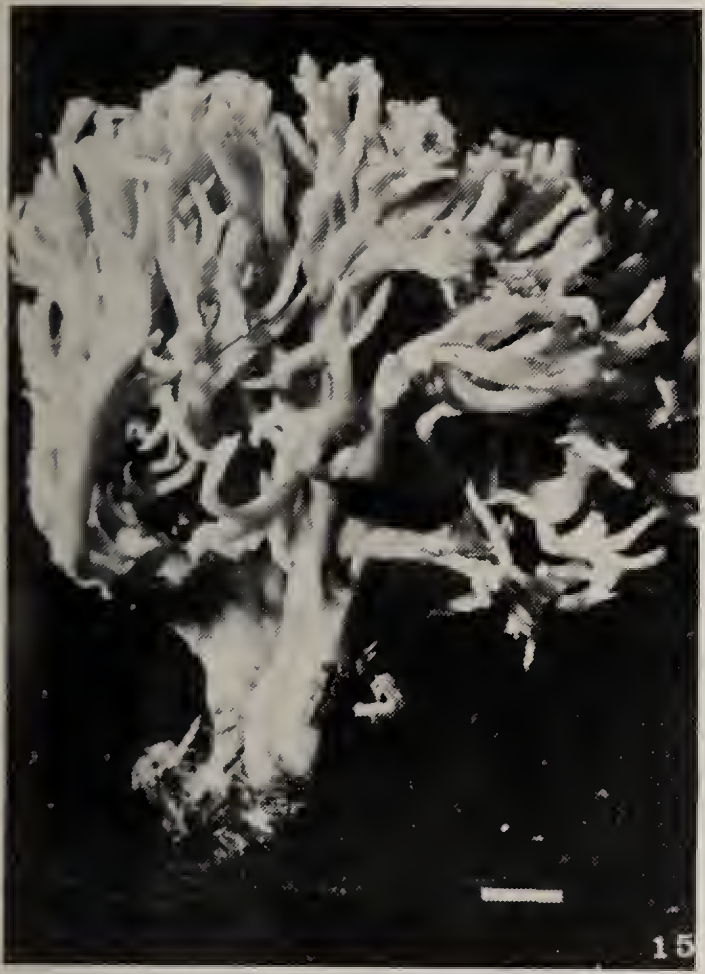
Discussion: Coker (1923) regards *C. pyxidata* as one of the most widely distributed of all species of plants. It is easily recognized in the field by the cup-shaped expansions at the ends of the branches. The cystidia and gloeocystidia distinguish it from other members of this genus.

Circumscription of the Genus Clavulina

Clavulina Schroet., Cohn, Krypt. Fl. Schles., Pilze, 442, 1888.

Type species: *C. cristata* (Fr.) Schroet., Cohn, Krypt. Fl. Schles., Pilze, 442, 1888.

Schroeter (1888) proposed this genus for *Clavaria cinerea, C. cristata,* and *C. rugosa* on the presence of 2-sterigmate basidia bearing globose or subglobose spores, and on the basidia becoming septate and partially evacuated after spore discharge. Karsten (1889) added *C. odorata* from Finland. A fifth species, *C.*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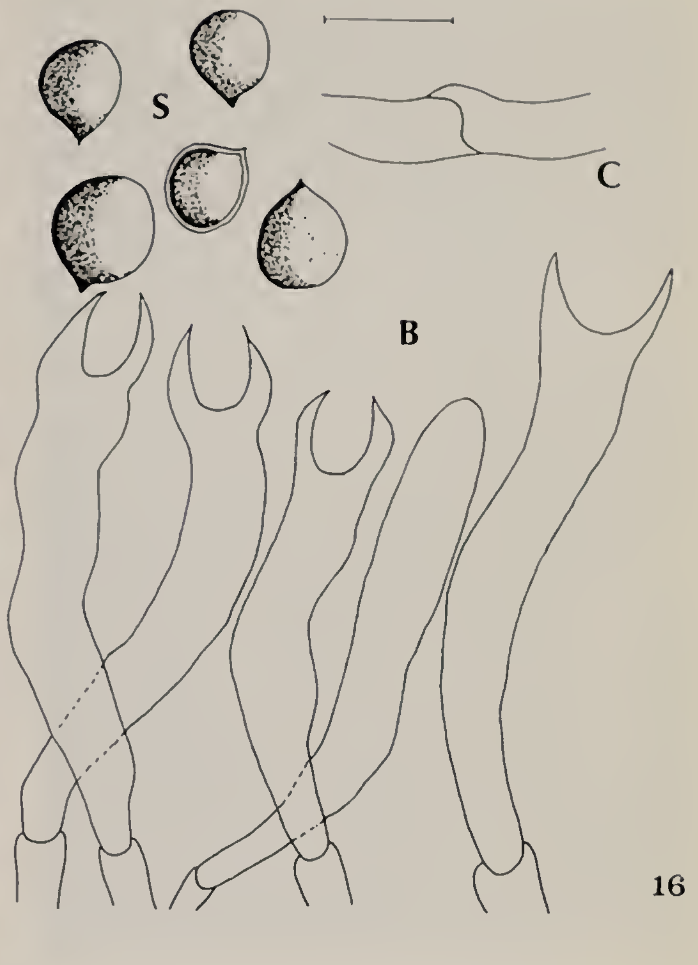

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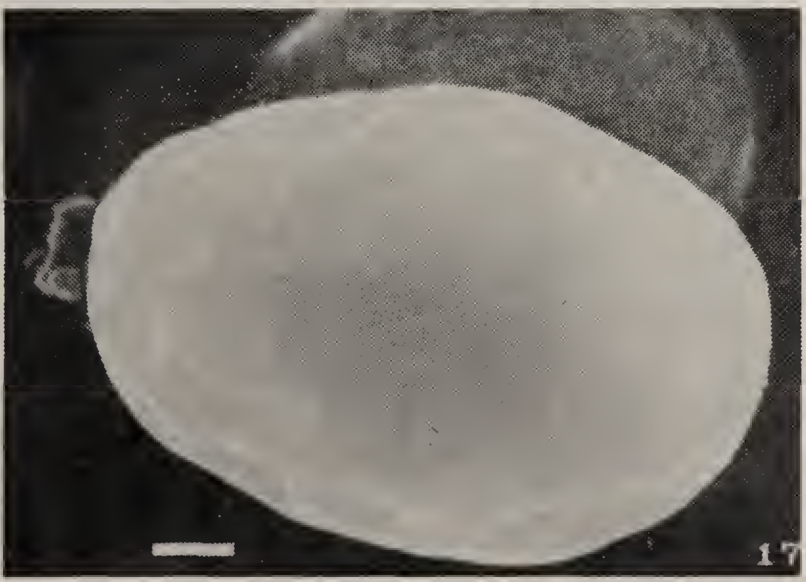
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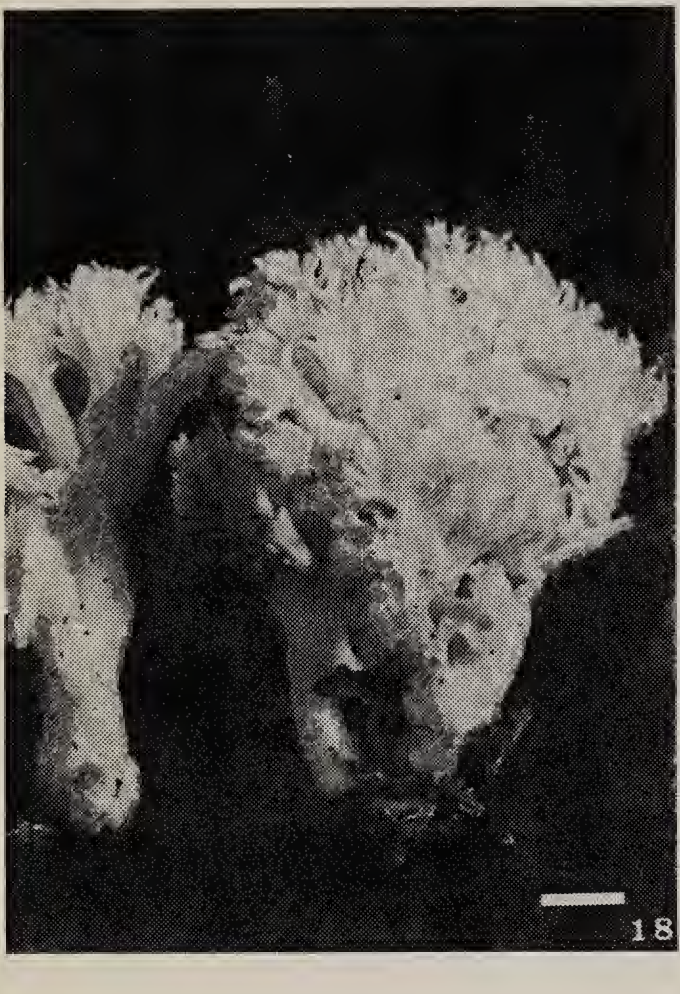
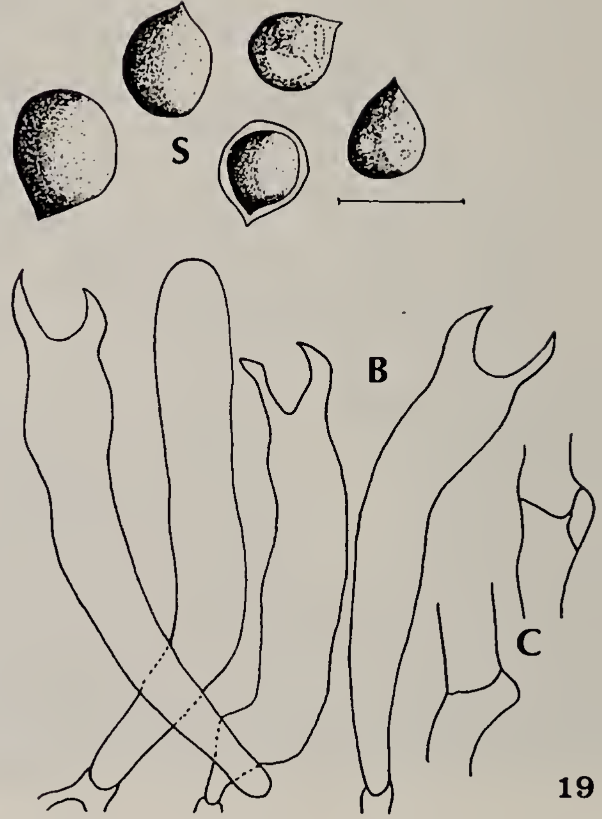
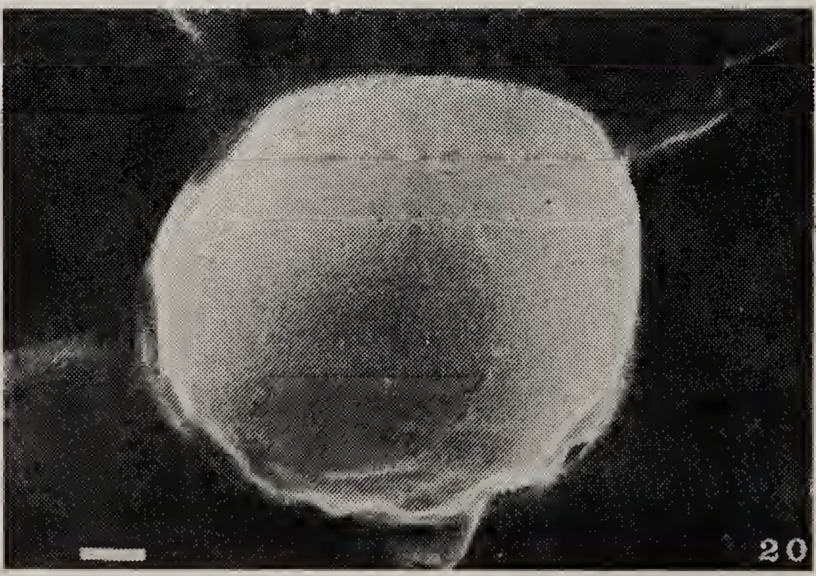
Figs 15, 16, 17. *Clavulina cinerea.*







Figs 18, 19, 20. *Clavulina cristata.*

leveillei from Java, was added by van Overeem (1923) and Donk (1933) added *C. amethystina*. Twenty-six new species were added to the genus by Corner, his conception of the genus being as follows: "Fruit-bodies simple or branched, *generally with flattened branching and more or less cristate tips,* in some species slightly dorsiventral with a sterile hymenium on the uppersides of the main branches: white or variously coloured, never bright yellow, orange, red, or black: flesh tough, waxy-fibrous, or rather brittle: *mostly terrestrial,* a few lignicolous, rarely on herbaceous remains (*C. cristata* var. *incarnata*).

Spores *white* (? brown in *C. decipiens*), generally ochraceous after prolonged drying (in the herbarium), *subglobose, or broadly ellipsoid, blunt, smooth, with 1 large gutta nearly filling the spore,* occasionally multiguttulate, 5-14 μ long.

Basidia subcylindric, projecting, usually *becoming secondarily septate with one or more septa after spore-discharge,* stichobasidial (? in all species): *sterigmata* 2, rarely 1, *generally incurved and short,* in some species nearly straight.

Cystidia present in a few species, generally absent.

Hymenium thickening: subhymenium persistently filamentous or becoming pseudo-parenchymatous.

Hyphae monomitic, with clamps in most species, generally with colourless slightly but distinctly thickened, walls (pale brown in *C. ornatipes* and *C. decipiens*), secondarily septate only in the species without clamps, *mostly short-celled* (20—120 μ long), *more or less inflated but often irregularly:* H-connexions frequent." (Corner, 1950).

Key to the Species of Clavulina

1. Fruit bodies pale grey to orange grey, tips blunt .... *C. cinerea* p. 19
1. Fruit bodies white to pale yellow, much branched, tips cristate, tinged brown, black or brick red .... *C. cristata* p. 20

Clavulina cinerea (Fr.) Schroet.

Cohn, Krypt. Fl. Schles. Pilze, 442, 1888.

Clavaria cinerea Fr. Syst. Mycol. 2: 468, 1821.
Ramaria cinerea S.F. Gray, Nat. Arr. Br. Pl. 1: 655, 1821.
Clavaria fuliginea Pers., Mycol. Eur. 1: 166, 1822.
Clavaria grisea (Fr.) Karst., Finl. Nat. o. Folk 37: 186, 1882.
Clavaria sphaerospora E. & E., J. Mycol. 4: 62, 1888.
Ramaria cinerea (Fr.) Quél., Flore Mycol. 465, 1888.

cinerea (L)—ash grey

Figs 15, 16, 17

Fructifications: Solitary, gregarious or cespitose, 2.5-10.0 cm, branches compact, flattened, divaricate, polychotomous below, dichotomous above, becoming longitudinally rugulose, axils acute, apices blunt, sometimes toothed, pale grey—6C1 (medium grey 265) to orange grey—6B2 (brownish pink 33). Stem up to 4 x 1 cm, mycelioid to finely scaly, arising from a well-developed white sterile mat. Context firm, white, slightly coriaceous. Spore deposit white. Odor and taste indistinct. Terrestrial, in fields and on humus in mixed or coniferous woods.

Macrochemical Tests: No significant color changes in aniline, α-naphthol, guaiac tincture, guaiacol, pyrogallol. An occasional positive reaction was observed with $FeSO_4$ and 2% phenol.

Microscopic Structures: Spores smooth, hyaline, subglobose, 6.5-8.5 x 6.0-8.0 μm. Basidia 35-45 x 5-7 μm, subcylindrical, with 2 sterigmata 6-7.5 μm long.

Hymenium 50 μm, thickening to 100 μm; subhymenium 15-25 μm. Contextual hyphae 5-12 μm broad; subhymenial hyphae 2-4 μm. Clamps abundant.

Collections Examined: ACAD 12885, 24/8/77, West Gaspereau, Kings Co.; ACAD 12886, 29/8/77, Melanson, Kings Co.; ACAD 12887, 7/9/77, Harrington slope, Kings Co.; ACAD 12888, 4/11/77, Aldershot sand plains, Kings Co.

Discussion: This species is distinguished from C. *cristata,* which seems to be the more common form, by the absence of cristate tips and by the darker pigmentation of the hymenium. The grey color is caused by the fuscous cytoplasm of the effete basidia (Corner 1950).

Helminthosphaeria clavariarum was commonly found as a parasite. The stem is attacked first, with infection then spreading to the rest of the plant giving it an overall black color. Parasitization has often resulted in the misindentification of this species as C. *nigricans* (Corner 1970).

Clavulina cristata (Fr.) Schroet.

Cohn, Krypt. Fl. Schles., Pilze, 442, 1888.

Clavaria cristata Fr. Syst. Mycol. 1: 473, 1821.
Clavaria fallax Pers., Mycol. Eur. 1: 167, 1822.
Clavaria trichopus Pers., Mycol. Eur. 1: 168, 1822.
Clavariella cristata (Fr.) Karst., Finl. Nat. o. Folk 37: 188, 1882.
Clavariella trichopus (Pers.) Karst., Finl. Nat. o. Folk 37: 188, 1882.
Clavaria cristata var. *minor* Pat., Tab. Anal., Fung. 261, 1884.
Ramaria cristata (Fr.) Quél., Flore Mycol. 464, 1888.

cristata (L)—crested

Figs 18, 19, 20

Fructifications: Solitary, gregarious or cespitose, 2.5-8.0 cm tall, white to yellowish white—2A2 (yellowish white 92), much branched, polychotomous, flattened, divaricate, axils acute, apices acute becoming cristate, tinged brown, black or brick red—7D7 (strong brown—55). Stem usually distinct, 0.5-3.0 in diam, up to 1.0 cm, velvety mycelioid. Context white, fibrous to moderately brittle. Spore deposit white. Taste bitter, odor absent. Terrestrial, in coniferous or deciduous woods.

Macrochemical Tests: No significant color changes in $FeSO_4$, α-naphthol, guaiac tincture, guaiacol, aniline. Positive reactions with 2% phenol. Occasional positive reactions occurring with pyrogallol.

Microscopic Structures: Spores smooth, subglobose, pale green, 6-8.5 x 5.0-7.5 μm. Basidia 30-45 x 5-7 μm, subcylindrical, with 2 sterigmata 5-7 μm long. Hymenium 50 μm, thickening to 100 μm; subhymenium 15-25 μm. Contextual hyphae 5-12 μm broad, subhymenial hyphae 2-4 μm, clamp connections abundant.

Collections Examined: ACAD 12889, 18/8/77, Lequille, Annapolis Co.; ACAD 12890, 22/8/77, Moores Falls, Kings Co.; ACAD 12891, 31/8/77, Moses Mountain, Hants Co.; ACAD 12892, 29/8/77, West Gaspereau, Kings Co.; ACAD 12893, 19/9/77, Grand River, Richmond Co.; ACAD 12894, 29/8/77, Melanson, Kings Co.; ACAD 12895, 20/10/77, AESK, Kentville, Kings Co.; ACAD 12896, 11/9/73, Kejimkujik Lake area, Annapolis Co.

Discussion: This species is the most abundant and the most variable of all the clavarias. The extreme variability has resulted in much confusion in attempts to identify *C. cristata, C. cinerea* and *C. rugosa* at the species level. Coker (1923) regards *C. cinerea* and *C. rugosa* as forms of *C. cristata*. Microscopically, the 3 species are indistinguishable. The white color and cristate tips, characteristic of *C. cristata,* separate it from *C. cinerea,* which is grey with blunt tips. In *C. rugosa,* which was not included in this survey, the clubs are "stouter, simple, or lobed, irregular, rugose, and generally appear deformed" (Wehmeyer 1935). Generally, specimens can be placed in one of the three groups. However, intermediate forms of each character occur, sometimes making it difficult to assign individuals to a specific taxon. It will be necessary for further study to be done on this genus in order to define the species clearly.

Circumscription of the Genus Clavulinopsis

Clavulinopsis van Ov., Bull. Jard. Bot. Buitenzorg, Ser. 3,5: 278, 1923.
Cornicularia Bon., Handb. Mycol., 166, 1851.

Type species: *C. sulcata* van Ov., Bull. Jard. Bot. Buitenzorg, Ser. 3,5: 279, 1923.

The earliest generic name for this group, which includes most, if not all, the yellow or orange but white-spored Clavarias, is *Cornicularia* Bon. (1851) based on *Clavaria corniculata* Fr., but it is a later homonym. *Clavulinopsis corniculata* was included in *Ramaria* S.F. Gray (1821) and thus *Ramaria* should have precedence as a genus. This would have complicated the definition of *Ramaria* so it was not followed.

Van Overeem (1923) described a Javanese clavaria, which belonged to this group, as *Clavulinopsis sulcata* and as a monotypic genus. Though no generic character was indicated, the name *Clavulinopsis* must be accepted as validly published in a combined generic-specific diagnosis.

Donk (1933) recognized *Clavulinopsis* but regarded it as synonymous with *Clavulina.* Doty (1948) accepted *Clavulinopsis* with *C. sulcata* as the type species. Corner (1950) expanded the genus to include approximately 60 species. Three subgenera, *Acularia, Clavulinopsis* and *Paraclavaria,* are separated (Corner 1970) on the basis of spore shape and ornamentation with types *C. helvola* (Fr.) Corner, *C. miniata* (Berk.) Corner, (earliest valid name for *C. sulcata* van Ov.) and *C. corniculata* (Fr.) Corner, respectively.

Corner (1950) describes the genus as follows: Fruit-bodies simple or branched, variously colored, often white, yellow, orange or red; stem sterile, more or less distinct; fleshy-waxy to rather tough, terrestrial. Spores white, or tinged yellow from the oil drop, smooth or, in a few species, coarsely echinulate, globose, pip-shaped or ellipsoid, usually 1-guttate, sometimes multiguttate. Hyphae monomitic, clamped, mostly inflating. Basidia mostly 4-spored, occasionally 2- or 3 spored.

Key to the Species of Clavulinopsis

1. Fruiting bodies simple 3
1. Fruiting bodies loosely branched 2
2. Yellowish white, with brown tips; up to 10 cm tall, context tough, odor unpleasant (strong); spores globose to subglobose, 3.5-6.0 x 4.0-6.5 μm. . . . . *C. cineroides* p. 26
2. Butter yellow, tips concolorous; 2-5 cm tall, moderately brittle, odor of green corn; spores subglobose, apiculate, 4.0-6.0 x 4.5-6.5 μm . *C. corniculata* p. 26
3. Fruiting bodies some shade of yellow 4

3. Fruiting bodies dark orange to carrot red, stem indistinct; cespitose with solitary individuals; spores subglobose, apiculate, 3.5-5.0 x 4-6.5 μm . . . . *C. aurantio-cinnabarina* p. 25
4. Spores globose or subglobose 5
4. Spores ovoid or ellipsoid 6
5. Vivid yellow, tips becoming brown; simple, densely fasciculate, fusiform, hollow, flattening, sometimes spirally twisted; spores globose with central apiculus, 4.0-6.0 x 4.5-6.5 μm . . . . *C. fusiformis* p. 29
5. Vivid yellow, tips concolorous; cylindric and blunt or subclavate, often becoming deeply longitudinally rugulose, often twisted, occasionally spathulately flattened and then with 1-4 blunt points or short antlered branches; spores subglobose, apiculate, 4-6 x 4-6 μm . . . . . . *C. amoena* p. 22
6. Dark yellow, drying concolorous; context firm, not brittle, basal tomentum white, crusty; spores 5-6.5 x 4-5.0 μm . . . . *C. laeticolor* p. 30
6. Melon yellow, drying light yellow; context friable, arising from a fine woolly basal tomentum; spores 5-8 x 3.5-4.5 μm . . . . *C. luteo-alba* p. 31

Clavulinopsis amoena (Zoll. & Mor.) Corner

Ann. Bot. Mem. 1: 352: 1950.

Clavaria amoena Zoll. & Mor., Nat. Geneesk. Arch. Neerl. Ind. 1: 380, 1844.
Clavaria subaurantiaca P. Henn. & Nym., Monsunia 1: 8, 1900.
Clavaria strigosa P. Henn. & Nym., Monsunia 1: 8, 1900.
Clavaria subargillacea Ito & Imai, Trans. Sapporo Nat. Hist. Soc. 15: 55, 1937.
Clavaria pallidorosea Fawcett, Proc. R. Soc. Victoria 51: 271, 1939.
Clavulinopsis aurantio-cinnabarina (Schw.) Corner f. *amoena* (Zoll. et Mor.) Petersen, Mycol. Mem. 2: 25, 1968.

amoena (L)—beautiful, pleasing

Figs 21, 22

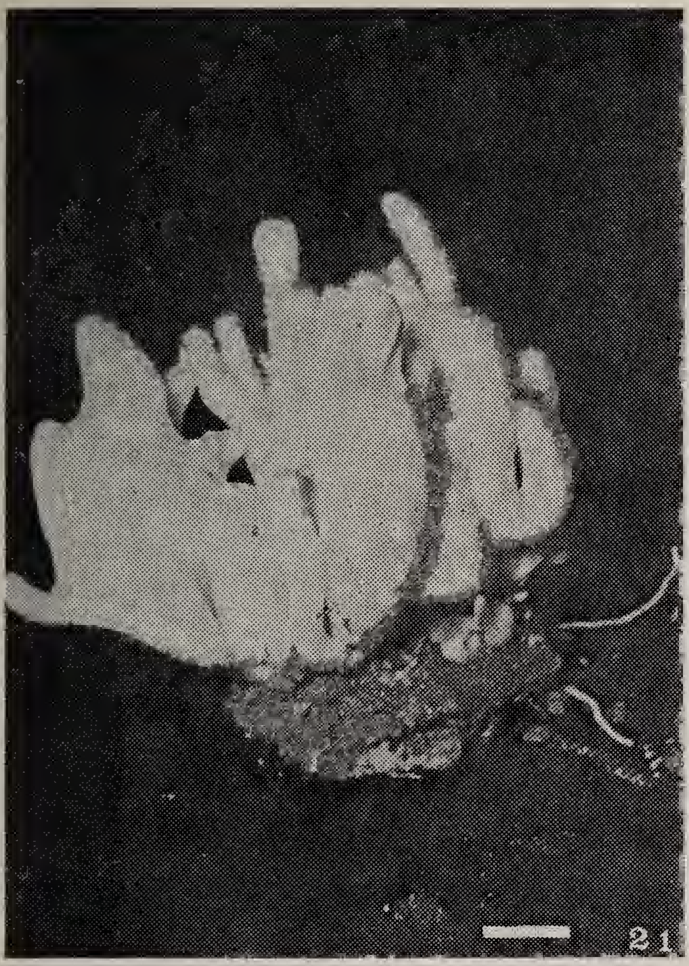
Fructifications: Simple, solitary or gregarious, cespitose, very variable in form, size and habit, 2-7 cm x 2-7 mm or flattened to 20 mm, cylindrical and blunt or subclavate often becoming deeply and extensively longitudinally rugulose, often twisted, occasionally spathulately flattened with 1-4 blunt points or short antlered branches, vivid yellow—3A8 (vivid yellow—82), maize—4A6 (brilliant orange yellow—67) upon drying; context waxy-firm becoming hollow, concolorous; stem indistinct. Spore deposit white. Odor absent. Taste mildly farinaceous. Terrestrial in deciduous woods.

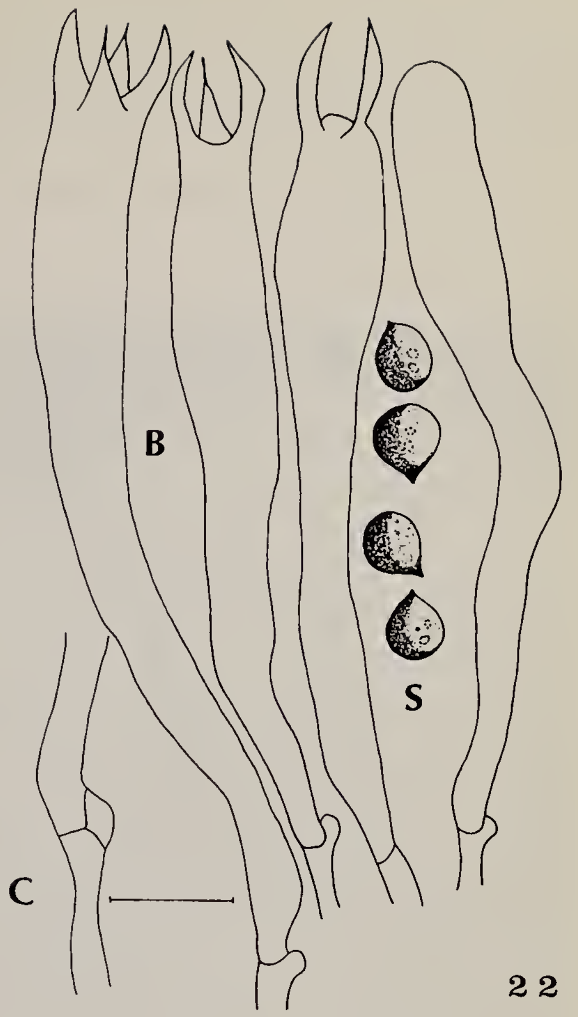
Macrochemical Tests: No color reactions occurring in pyrogallol, α-naphthol, guaiac tincture, guaiacol, 2% phenol, aniline. Positive color change with $FeSO_4$.

Microscopic Structures: Spores 4-6 x 4-6 μm, pale green, smooth, subglobose, thin-walled, apiculus 0.5-1.0 μm long. Basidia 45-60 x 5-8 μm; 2 or 4 sterigmata, 5-8 μm long. Hymenium 45-50 μm, thickening to 70-150 μm; subhymenium 10-20 μm. Clamp connections present.

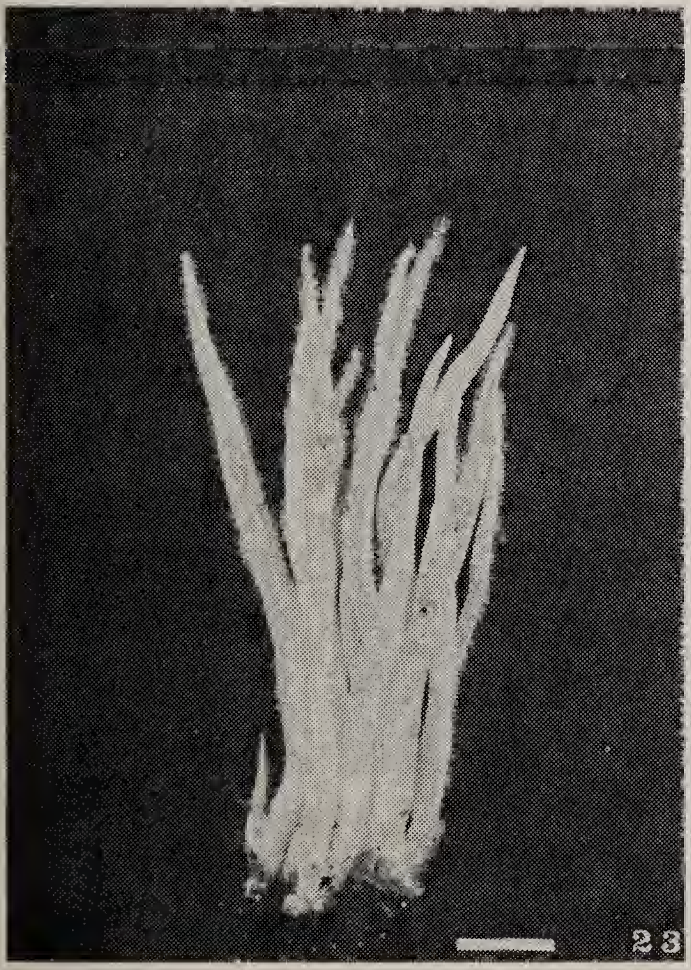
Collections Examined: ACAD 12897, 26/9/77, Sunken Lake, Kings Co.

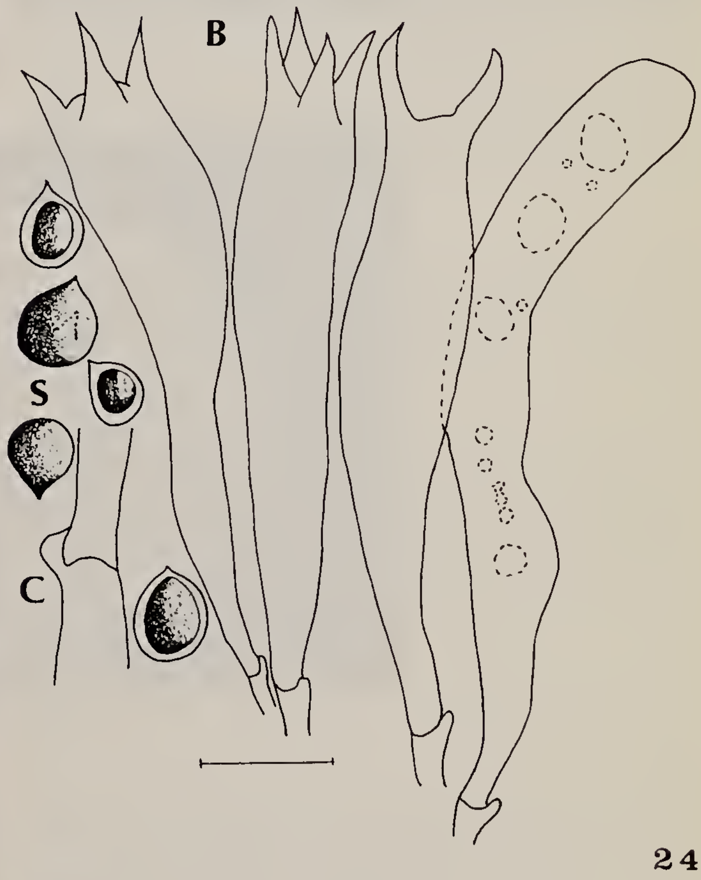
Discussion: There is considerable variation within this species in height, thickness of hymenium and spore size. Corner (1950) attributes the variability in height to the variation in apical growth. The richness of the substratum determines the extent of hymenial growth, thus determining the thickness. According to Corner



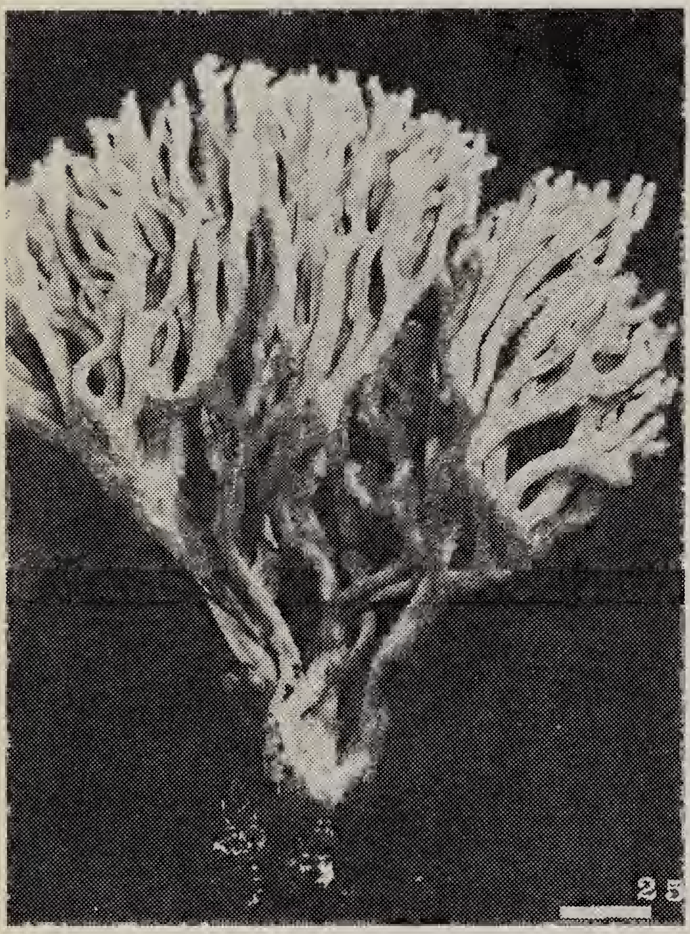


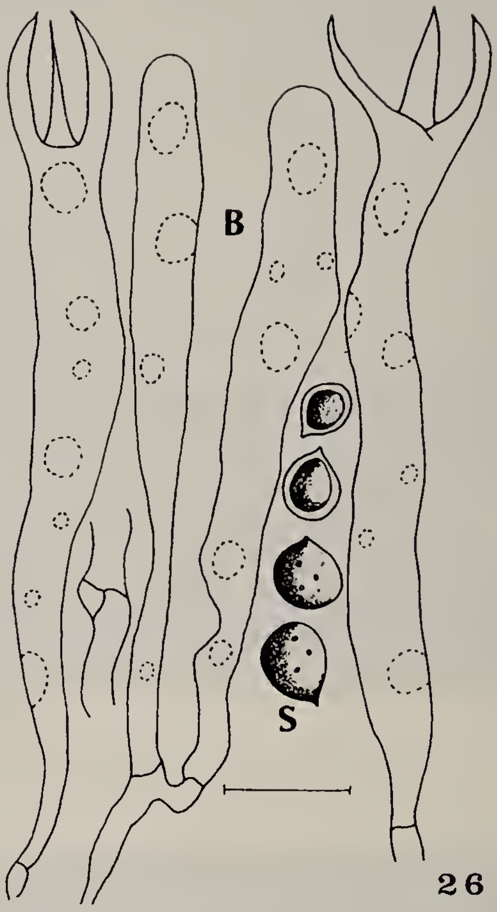
Figs 21, 22. *Clavulinopsis amoena.*

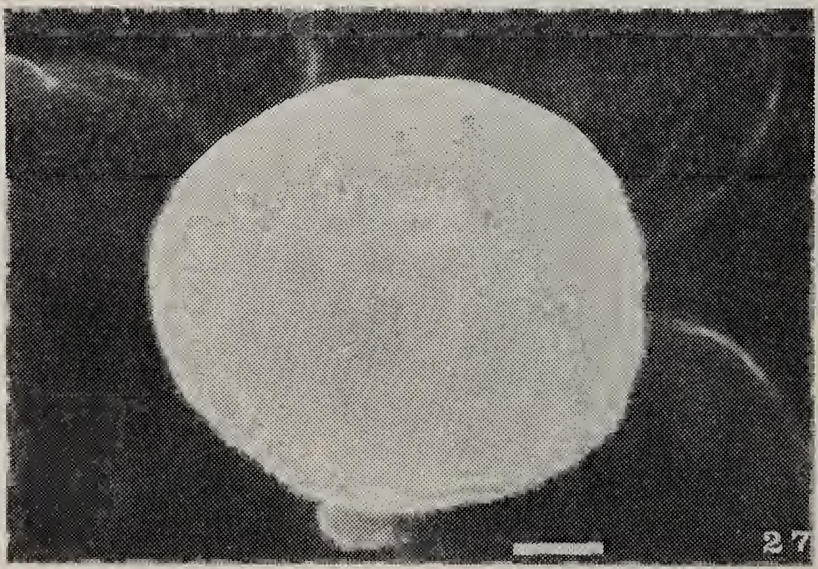




Figs 23, 24. *Clavulinopsis aurantio-cinnabarina.*







Figs 25, 26, 27. *Clavulinopsis cineroides.*

(1950), this is why old fruit-bodies with much-thickened hymenia become dilated, hollow and rugulose. Variation in both height and thickness was observed within collection 12897.

The spores and occasional basidia showed a dextrinoid reaction in Melzer's reagent.

Petersen (1968) reduced this species to a form of *C. aurantio-cinnabarina* on the basis of similarity in microscopic detail. Corner (1970) supports the retention of this species though, relating *C. amoena* more closely with *C. fusiformis* than *C. aurantio-cinnabarina*. Collection 12897 did not have the reddish pigmentation characteristic of *C. aurantio-cinnabarina,* nor was it identical in microscopic characteristics.

Clavulinopsis amoena was considered to be a tropical species (Corner 1950) but Petersen (1968) has reported collections from the eastern U.S.A. This is the first report of *C. amoena* from Nova Scotia.

Clavulinopsis aurantio-cinnabarina (Schw.) Corner

Ann. Bot. Mem. 1: 358, 1950.

Clavaria aurantio-cinnabarina Schw., Trans. Am. Philos. Soc. 2,4: 183, 1832.
Clavaria schimadai Imai, Trans. Sapporo Nat. Hist. Soc. 11: 41, 1929.
Clavaria miyabeana Imai, Trans. Sapporo Nat. Hist. Soc. 11: 72, 1930.

aurantio-cinnabarina = aurantiacus (L)—orange, between yellow and scarlet
cinnabarinus (L)—vermilion

Figs 23, 24

Fructifications: Simple, cespitose with scattered solitary individuals, 1.5-9.0 cm high, cylindrical, smooth, sometimes developing a central furrow, apices blunt or acute, often curving, dark orange—5A8 (vivid orange yellow—66), carrot red—6B7 (moderate orange—53), with drying, hollow, moderately brittle, stem indistinct. Spore deposit cream—4A3 (pale orange yellow—73). Taste indistinguishable. Odor foetid. Terrestrial, in mixed woods, often under *Fagus grandifolia.*

Macrochemical Tests: Positive color reactions occurring with $FeSO_4$. No significant color reactions occurring in pyrogallol, α-naphthol, guaiac tincture, guaiacol, 2% phenol, aniline.

Microscopic Structures: Spores smooth, pale green, subglobose, 3.5-5.0 x 4.0-6.5 µm, apiculate, 1-guttate. Basidia 40-50 x 5-9 µm, with 2 or 4 sterigmata 5-8 µm long, filled with large oil droplets. Hymenium 40-60 µm, containing numerous small granular crystals; subhymenium 10-20 µm. Contextual hyphae 3.5-9.0 µm broad; subhymenial hyphae 2-3 µm. Clamp connections present.

Collections Examined: ACAD 12898, 12/9/77, Harrington woods, Kings Co.; ACAD 12899, 17/9/77, Gospel Wood Road, Kings Co.

Discussion: In the field, this species is easily distinguished from others of the same shape and habit by its deep orange-red color. It most closely resembles *C. fusiformis* but the spores of *C. aurantio-cinnabarina* are subglobose rather than globose.

Wehmeyer (1935), from his Nova Scotian collections, reported yellow tips on the young clubs, triangular spores 6-7 x 4-5.2 µm, and dark reddish brown conducting hyphae 3.5-7.0 µm wide in the hymenium. None of the above features was observed in collections ACAD 12898 or 12899.

Clavulinopsis cineroides (Atk.) Corner

Ann. Bot. Mem. 1: 360, 1950.

Clavaria cineroides Atk., Ann. Mycol. 7: 367, 1909.

cineroides (L)—ash grey

Figs 25, 26, 27

Fructifications: Solitary, up to 10 cm tall x 5-7 cm wide, very loosely and openly branched from a scurfy, white, mycelioid base; branches dichotomous, cylindrical, smooth, solid; axils rounded, apices bidentate, blunt; yellowish white—4A2 (yellowish white—92), drying cream—4A3 (pale yellow—89), tips becoming hair brown—5E4 (moderate yellowish brown—77). Context tough. Spore deposit white. Odor strong and unpleasant. Taste rank. Terrestrial, in mixed woods.

Macrochemical Tests: No significant color reactions in $FeSO_4$, α-naphthol, guaiac tincture, guaiacol, aniline. Positive reactions with pyrogallol, 2% phenol.

Microscopic Structures: Spores hyaline, smooth, globose to subglobose, 1-guttate, 3.5-6 x 4-6.5 μm. Basidia 50-60 x 5-7 μm, with 4 sterigmata 5-11 μm long. Hymenium thickening to 120 μm; subhymenium 20 μm. Contextual hyphae 3-4 μm wide, long, slender cells; subhymenial hyphae 2-3 μm. Clamp connections present.

Collections Examined: ACAD 12900, 12/9/77, Harrington woods, Kings Co.; ACAD 609, 21/8/32, Stillwater Lake, Guysborough Co.; ACAD 610, 4/9/32, Scots Bay, Kings Co.

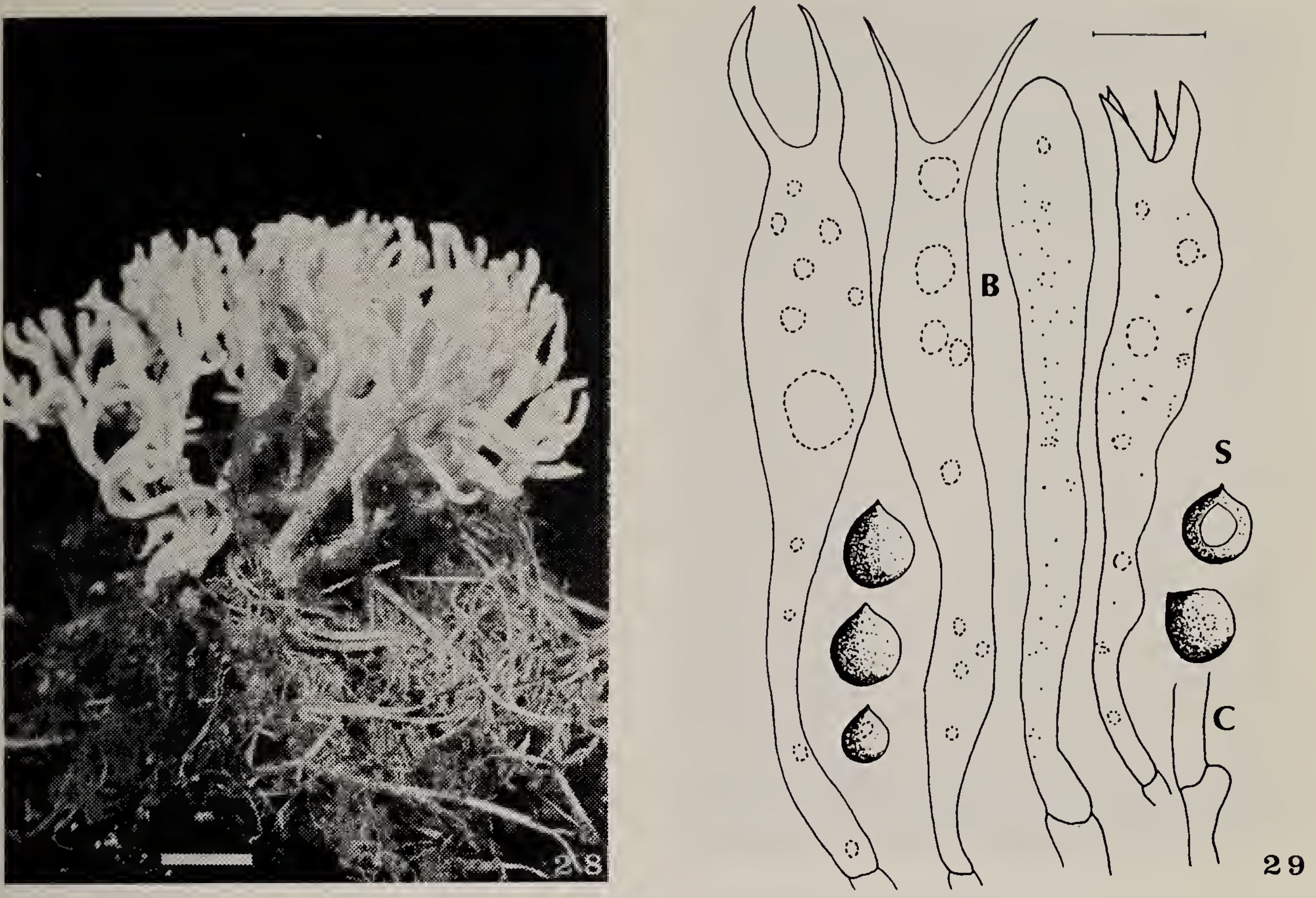
Discussion: This species closely resembles *C. corniculata* but is separated by the paler color and the larger size. The rank taste and unpleasant odor were not reported by Corner (1950) or Coker (1923). The unmistakable, strong, unpleasant odor lingered in the laboratory during the time the fungus was drying. Coker (1923) did report a rank odor for *C. corniculata* while Corner (1950) described this as mealy. Collection 12901 *(C. corniculata)* had an odor of green corn.

Clavulinopsis corniculata (Fr.) Corner

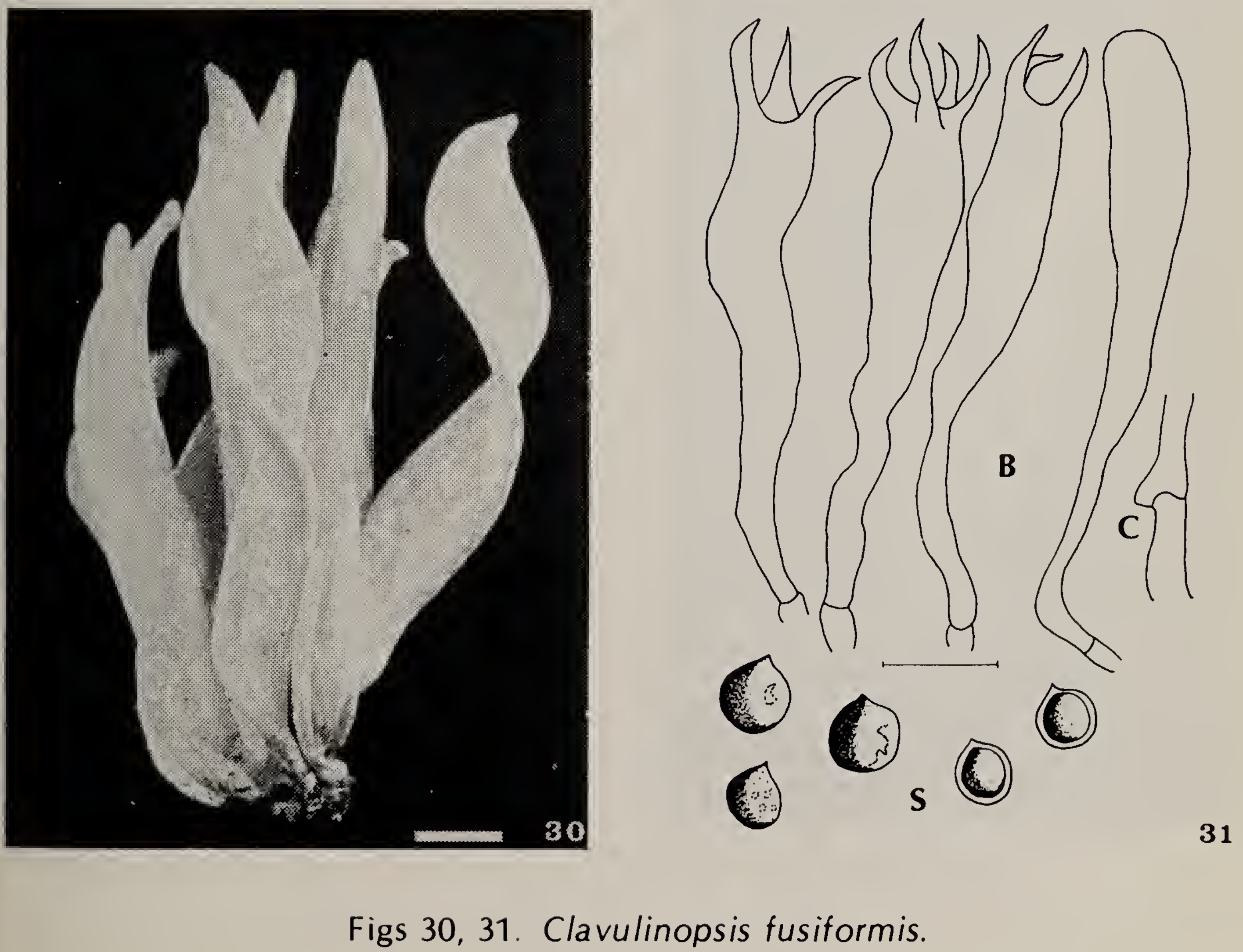
Ann. Bot. Mem. 1: 363, 1950.

Clavaria corniculata Fr., Syst. Mycol. 1: 471, 1821.
Clavaria pratensis Fr., Syst. Mycol. 1: 471, 1821.
Ramaria corniculata S.F. Gray, Nat. Arr. Br. Pl. 1: 655, 1821.
Ramaria pratensis S.F. Gray, Nat. Arr. Br. Pl. 1: 655, 1821.
Clavaria vitellina Pers., Mycol. Eur. 1: 170, 1822.
Clavaria helvola Fr., var *dispar* Pers., Mycol. Eur. 1: 181, 1822.
Clavaria fastigiata Fr., Epicr. Syst. Mycol. 571, 1838.
Clavaria muscoides Fr., Epicr., Syst. Mycol. 571, 1838.
Ramaria corniculata (Fr.) Quél., Flore Mycol. 466, 1888.
Ramaria fastigiata (Fr.) Quél., Flore Mycol. 466, 1888.
Clavaria similis Pk., Rep. N.Y. State Mus. 43: 24, 1890.
Clavaria peckii Sacc., Syll. Fung. 9: 249, 1891.
Clavaria fellea Pk., Rep. N.Y. State Mus. 51: 292, 1898.
Clavaria caloceriformis Oud., Beih, Bot. Centralbl. 11: 525, 1902.

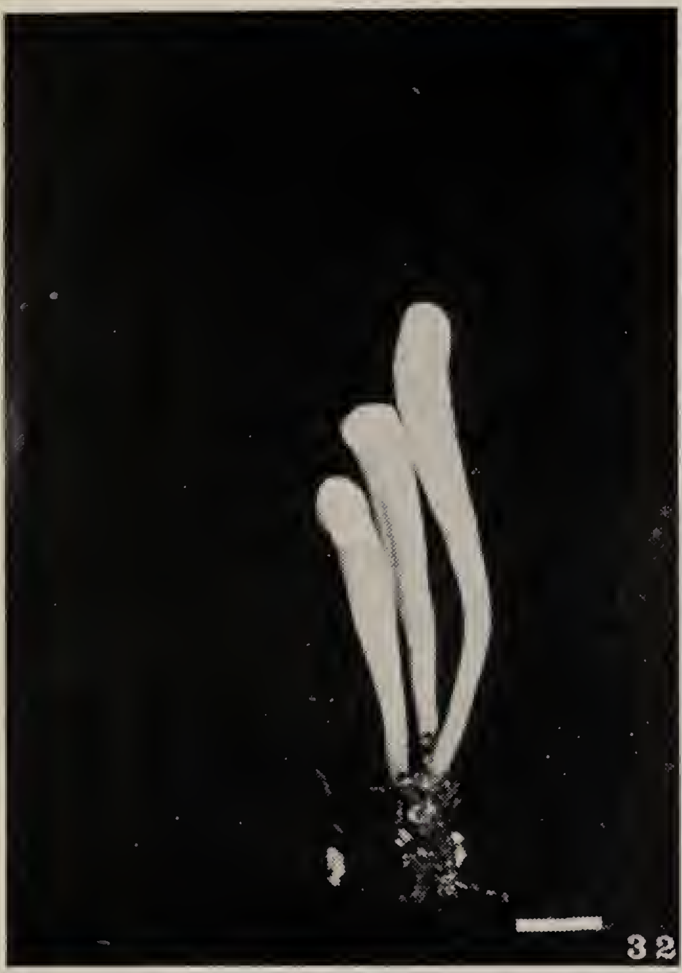
corniculata (L)—having small horns
Figs 28, 29



Figs 28, 29. *Clavulinopsis corniculata.*



Figs 30, 31. *Clavulinopsis fusiformis.*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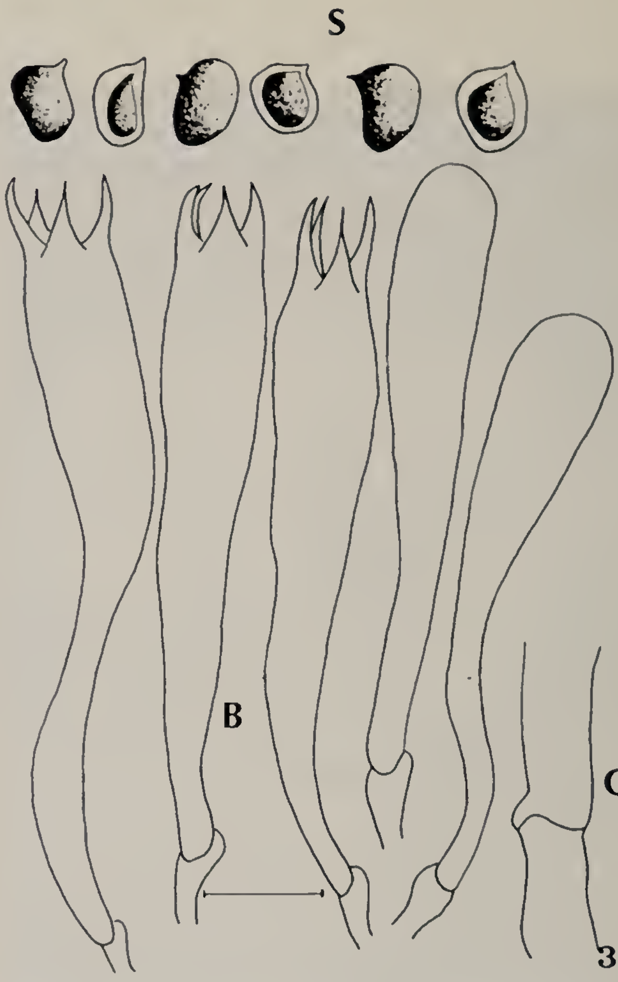

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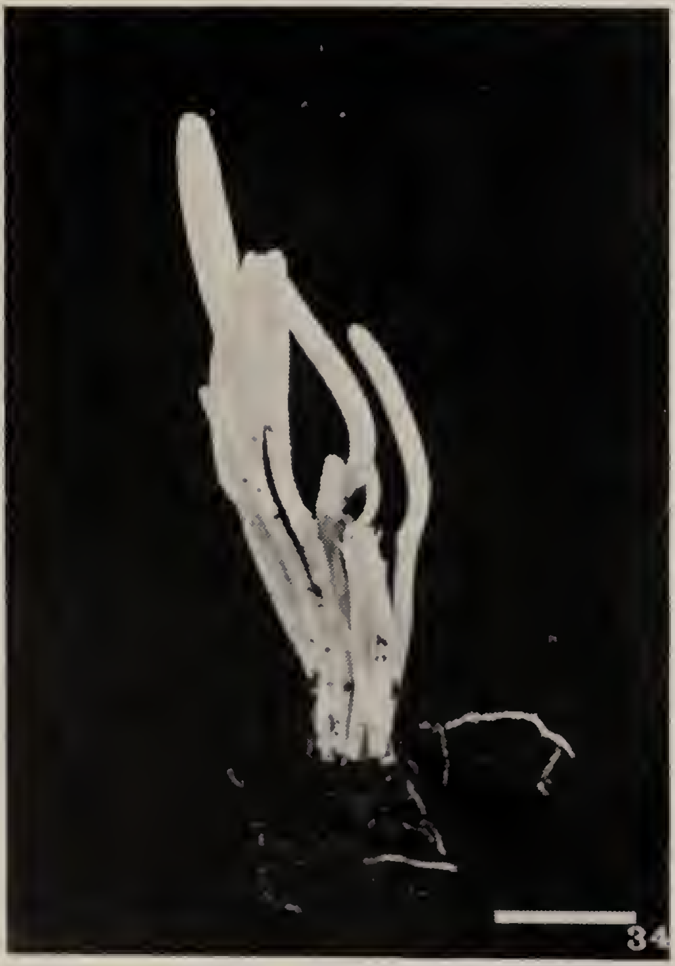
Figs 32, 33. *Clavulinopsis laeticolor.*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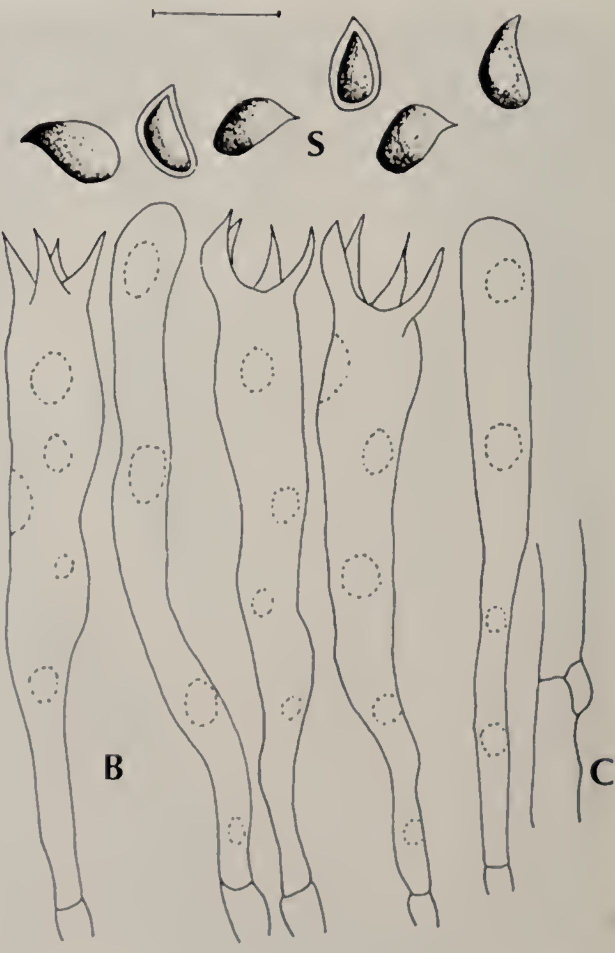


35

Figs 34, 35. *Clavulinopsis luteo-alba.*

Fructifications: Gregarious or cespitose, branched dichotomously into cylindrical branches, divaricate with lunate axils, smooth, 2-5 cm, sometimes becoming furrowed, hollow, lower branches sometimes polychotomous and intertwined; color butter yellow—4A5 (pale yellow—89) drying light yellow—4A4 (pale orange yellow—73). Context concolorous, moderately brittle. Stem 0.75-2.50 cm long, white, subtomentose at base. Spore deposit white. Taste bitter. Odor of green corn.

Macrochemical Tests: Positive color reactions with $FeSO_4$, pyrogallol, 2% phenol. No. color changes occuring in α-naphthol, guaiac tincture, guaiacol, aniline.

Microscopic Structures: Spores smooth, subglobose, pale green, 4-6 x 4.5-6.5 μm, apiculus 1.0 μm. Basidia 40-55 μm, with 2 or 4 sterigmata 5-10 μm long. Hymenium 50-60 μm; subhymenium 10-15 μm. Contextual hyphae 3-7 μm broad, thin-walled, interwoven; subhymenial hyphae 1-3 μm. Clamp connections present. Terrestrial, among grass in fields or lawns and in mixed woods.

Collections Examined: ACAD 12901, 12/10/77, Comeau lawn, Kentville, Kings Co.; ACAD 4491, 22/9/62, Lake Kejimkujik area, Annapolis Co.

Discussion: In shape and habit, this species is similar to *C. cineroides* but *C. corniculata* may be distinguished by its smaller size, darker yellow color and the odor of green corn. Corner (1950) and Henry (1967) have reported the context as "firm rather tough" while Coker (1923) reported a brittle context. The flesh of ACAD 12901 was moderately brittle.

Clavulinopsis fusiformis (Fr.) Corner

Ann. Bot Mem. 1: 367, 1950.

Clavaria fusiformis Fr., Syst. Mycol. 1: 420, 1821.
Clavaria platyclada Pk., Bull, Torrey Bot. Club 23: 419, 1896.

fusiformis— fusus (L)—a spindle
forma (L)—shape

Figs 30, 31

Fructifications: 3-10 cm tall, simple but densely fasciculate, hollow, fusiform, flattening often becoming spirally twisted, smooth, vivid yellow—4A8 (vivid yellow—82), drying concolorous, tips becoming rust brown—6E8 (deep brown—56); context white, relatively brittle; stem indistinct, base white, finely mycelioid. Spore deposit cream—4A3 (pale orange yellow—73). Taste mild. Odor absent. Terrestrial. Common in mixed woods and in mossy or grassy areas in open fields.

Macrochemical Tests: Positive color reactions occuring with $FeSO_4$. No color changes occurred in α-naphthol, guaiac tincture, guaiacol, aniline. Occasional faint reactions occurred with pyrogallol and 2% phenol.

Microscopic Structures: Spores pale yellow-green, smooth, 4-6 x 4.5-6.5 μm, globose with central apiculus, multiguttulate, or with 1 large gutta. Basidia 40-60 μm x 6-7 μm, with 2 or 4 sterigmata 4-10 μm long. Hymenium 40-70 μm thick; subhymenium 10-20 μm. Contextual hyphae 3.5-7.0 μm broad, thin-walled; subhymenial hyphae 2-3 μm broad. Clamp connections present.

Collections Examined: ACAD 12902, 29/7/77, Aylesford Lake, Kings Co.; ACAD 12903, 24/8/77, West Gaspereau, Kings Co.; ACAD 12904, 31/8/77, Moses Mountain, Hants Co.; ACAD 12905, 24/8/77, Trout Lake, Annapolis Co.; ACAD 12906, 12/9/77, Harrington woods, Kings Co.; ACAD 12907, 17/9/77. Gospel Woods Road, Kings Co.; ACAD 12908, 2/9/77, Harrington slope, Kings Co.

Discussion: Clavulinopsis fusiformis is the most common species of this genus. It is distinguished by the globose spores with central apiculus and by the densely fasciculate groups of clubs which are usually hollow and fusiform and remain yellow upon drying. Owing to its common occurrence, similar taxa are frequently misidentified as *C. fusiformis.*

Clavulinopsis laeticolor (B. and C.) Petersen

Mycologia 57: 522, 1965.

Clavaria laeticolor B. and C., J. Linn. Soc. Lond. 10: 338, 1868.
Clavaria pulchra Peck, Rep. N.Y. State Mus. 28: 53, 1876.
Clavulinopsis pulchra (Pk.) Corner, Ann. Bot. Mem. 1: 384, 1950.

laeticolor (L)—cheerfully, pleasantly, brightly colored

Figs 32, 33

Fructifications: Simple, gregarious or solitary in small tufts, cylindrical and acute becoming blunt, compressed, spathulate or rugulose, 1.5-8 cm x 1.2-6.0 mm; genet—3A7 (brilliant yellow—83) to dark yellow—4A8 (vivid yellow—82), unchanging upon drying. Context concolorous, firm, not brittle. Stem distinct, 0.5-2.0 cm, white, finely mycelioid, arising from a white, crusty, basal tomentum. Spore deposit white. Taste sweet. Odor absent. Terrestrial, among grass in fields or in coniferous woods.

Macrochemical Tests: No significant color changes occurring in $FeSO_4$, pyrogallol, α-naphthol, guaiac tincture, guaiacol, 2% phenol, aniline.

Microscopic Structures: Spores smooth, hyaline, ovoid, broadly ellipsoid or subglobose, with distinct oil drop, 2-6.5 x 4-5 μm, slightly thick-walled, sublateral apiculus 1-2 μm long; basidia 50 x 5-8 μm, with 4 sterigmata 6-7 μm long. Hymenium 50-75 μm thick; subhymenium 10-20 μm thick. Contextual hyphae 3-8 μm broad, long-celled; subhymenial hyphae 2.4 μm broad. Clamps present.

Collections Examined: ACAD 12909, 12/10/77, Comeau lawn, Kentville, Kings Co.; ACAD 12910, 20/10/77, Agriculture Canada Experimental Station, Kentville, Kings Co.; ACAD 5027, 14/9/63, Lake Kejimkujik Area, Annapolis Co.; ACAD 5030, 10/9/63, Melrose, Guysborough Co.

Discussion: This species is distinguished from *C. fusiformis* and *C. luteo-alba,* which it most closely resembles, by its deeper color, nonfasciculate habit and ovoid, apiculate spores. Coker (1923) reports the bitter or farinaceous taste as characteristic but this was not evident in collection 12909 or 12910.

Petersen (1965) examined the type specimen of *Clavaria pulchra* at New York State Museum Herbarium in Northville and Chittenango Falls, N.Y. (NYS) and the type specimens of *C. laeticolor* at University of North Carolina Herbarium (UNCC), Royal Botanic Gardens Herbarium, Kew (K), and Farlow Reference Library and Herbarium of Cryptogamic Botany, Harvard University (FH). He considered Peck's species to be a later synonym and designated the material at K as lectotype and the specimens at UNCC and FH as syntypes, proposing the name *Clavulinopsis laeticolor* (B. & C.) Petersen.

Clavulinopsis luteo-alba (Rea) Corner

Ann. Bot. Mem. 1: 374, 1950.

Clavaria luteo-alba Rea, Trans. Br. Mycol. Soc. 2: 66, 1903.
Clavaria helveola Pers. sensu Coker, Clav. U.S. Can., 37, 1923.

luteo-alba— luteus (L)—golden yellow
alba (L)—white

Figs 34, 35

Fructifications: Simple, occasionally with 2 or 3 short branches, gregarious, scattered or cespitose, cylindrical, acute, often curved, becoming finely longitudinally rugulose, hollow, 1.5-5.0 cm x 1.0-3.5 mm, melon yellow—5A6 (moderate orange—53), light yellow—4A4 (pale orange yellow—73) upon drying. Context concolorous, floccose, friable. Stem short and distinct, arising from a white, finely woolly basal tomentum. Spore deposit white. Taste musty. Odor absent. Among grass in fields or lawns or growing on rotting wood in the humus layer in mixed woods.

Macrochemical Tests: No significant color reactions in $FeSO_4$, pyrogallol, α-naphthol, guaiac tincture, guaiacol, 2% phenol, or aniline.

Microscopic Structures: Spores smooth, hyaline, ellipsoid, flattened adaxially, 5-8 x 3.5-4.5 μm, apiculus 0.5 μm long. Basidia 40-60 x 4-7 μm, containing large yellow oil droplets; 4 sterigmata, 5-7 μm long. Hymenium 50-70 μm thick; subhymenium 10-20 μm. Contextual hyphae 3-5 μm broad, long-celled, occasionally inflating up to 13 μm; yellow conducting hyphae, 5 μm in diameter, interwoven throughout the context; subhymenial hyphae 1.5-3 μm. Clamp connections present.

Collections Examined: ACAD 12911, 20/9/77, Agriculture Canada Experimental Station, Kentville, Kings Co.

Discussion: The distinguishing features of *C. luteo-alba* are the melon yellow color of fresh material, drying light yellow, the finely longitudinally rugulose club, and the adaxially flattened, apiculate spores.

Circumscription of the Genus *Lentaria*

Lentaria Corner, Ann. Bot. Mem. 1: 437, 1950.

Type species: *Lentaria surculus* (Berk.) Corner, Ann Bot. Mem. 1: 444, 1950.

Corner (1950) proposed *Lentaria* for 2 groups of *Clavaria* which did not fit into the microscopic characterization of other genera. The 2 groups were named subgenus *Eu-Lentaria* and subgenus *Lentariopsis*. He related *Eu-Lentaria,* with thick-walled hyphae, tough, radially branched yellowish-ochraceous fruit-bodies, lignicolous habit and abundant development of the secondary mycelium to the *stricta*-group of *Ramaria*. *Lentaria* has smooth, thin-walled spores, white in most cases, and narrowly ellipsoid or elongate. Spores in the *stricta*-group are rough, short ellipsoid with yellow, ochraceous or nearly ferruginous, thickened walls. *Lentaria byssisseda* and *L. micheneri* spores have been reported white, cream, pale ochraceous by different authors, thus appearing to bridge the gap between *Lentaria* and *Ramaria*.

Petersen (1967) distinguished 2 groups existing within the genus which did not correspond with the 2 subgenera. The first group had rather large, usually well-branched fruiting bodies, arising from an extensive mycelial mass with thick-walled, dichotomously branched contextual hyphae, generally parallel but loosely arranged. The second group, which included the common *L. mucida,* was distinguished by small, usually simple or sparsely branched fruiting bodies almost exclusively associated with mosses or algae, naked insertion in the substratum or very small mycelial mat, and slightly thickened, tightly packed hyphae, strictly parallel and rarely branched. To accommodate the species in this second group, Petersen (1967) created the genus *Multiclavula* Petersen.

Corner (1970) rejected the genus as the species *L. albovinacea, L. micheneri,* and *L. soluta* supply every gradation in structure and form between *L. surculus* and *L. mucida* representing Petersen's first and second groups respectively. Corner also pointed out that *L. afflata* and *L. delicata,* both placed in the genus *Multiclavula,* are neither phycophilous or bryicolous.

Corner (1950) described the genus *Lentaria* as follows: Fruiting bodies radially branched, white, cream, alutaceous, tan, flesh-color, ochraceous or brownish, often arising from a spreading villous or subtomentose, white or yellowish, sterile mycelial felt; flesh tough, pliant. Spores white, smooth, narrowly ellipsoid, aguttate. Hymenium usually thickening. Hyphae clamped, inflating, becoming thick-walled.

Lentaria mucida (Fr.) Corner

Ann. Bot. Mem. 1: 442, 1950.

Clavaria mucida Fr., Syst. Mycol. 1:476, 1821.
Clavaria mucida var. *curtisii* Berk., Grevillea 2: 17, 1873.

mucida (L.)—slimy, mucous, mucilaginous

Figs 36, 37

Fructifications: Gregarious, 3-15 mm tall, mostly simple, clavate, sometimes forked into 2 to 6 curved ascending branches, apices acute. White becoming yellowish white—2A2 (yellowish white—92), apex sometimes becoming black—2C7. Stem indistinct. Context delicate, but tough, solid, not breaking with handling. Spore deposit white. Odor fishy. Taste absent. Lignicolous, on decaying wood in mixed woods, associated with alga *Chlorococcus,* which forms a surface coat on logs beneath the fruiting bodies.

Macrochemical Tests: No significant color reactions in $FeSO_4$, pyrogallol, α-naphthol, guaiac tincture, guaiacol, 2% phenol, aniline.

Microscopic Structures: Spores smooth, pale green, subglobose to ellipsoid, 4-8 x 2-4μm. Basidia 25-35 x 3-6μm, with 4 sterigmata 4-5 μm long. Hymenium 35-45 μm thick; subhymenium 6-10 μm. Contextual hyphae 2-5μm broad, of 2 kinds: (a) with oil globules, (b) without oil globules, thickened walls 0.1-0.5 μm; subhymenial hyphae 2-3 μm. Clamp connections present.

Collections Examined: ACAD 12912, 2/11/77, Harrington woods, Kings Co.; ACAD 627, 8/10/32, Agriculture Canada Experimental Station, Kentville, Kings Co.

Discussion: Lentaria mucida is the most cosmopolitan species in the genus and its form is variable in color, size and shape (Petersen 1967). It has been suggested (Coker 1923) that *L. mucida* is a lichen rather than a true basidiomycete as it is found only in conjunction with the alga *Chlorococcus.* Corner (1950) has pointed out that since there is no alga in the fruiting body, this is a case of semiparisitism rather than symbiosis. Coker (1923) has reported that in North America this fungus grows only on species of *Nyssa.* Petersen (1967) reported the species to be most common on *Populus tremuloides.* Collections 627 and 12912 were growing on deciduous wood.

Circumscription of the Genus Ramaria

Ramaria (Fr.) Bonorden, Handb. Mykol., 166, 1851.
Cladaria Ritgen, Schr. Marb. Ges. 2: 94, 1831.
Clavaria sect. *Ramaria* Fr., Epicr. Syst. Mycol. 571, 1838.
Clavariella Karst., Rev. Mycol. 3: 21, 1881.
Lachnocladium sect. *Coniocladium* Pat. & sect. *Dendrocladium* Pat., Bot. 3: 23, 33, 1889.
Phaeoclavulina Brinkm., Jahrb. Westfal. Prov. Ver. Wiss. Kunst., Bot. Sect., 197, 1896-7.
Dendrocladium Lloyd, Mycol. Writ. 5: 870, 1919.
Lectotype: *R. botrytis* (Fr.) Ricken, Vademecum, 253, 1918.

Holmskjöld (1790) proposed the name *Ramaria* for those clavarioid fungi possessing branching habit. *R. coralloides* var. *alba apicibus purpurascentibus* was included in this group. Persoon (1797), although he did not continue with *Ramaria,* in his comments on Holmskjöld's reprinted edition, used the synonymous name of *R. coralloides* var. *alba apicibus purpurascentibus, Clavaria botrytis.* Gray (1821) validated Holmskjöld's genus *Ramaria,* citing Holmskjöld as author. Fries (1821), however, validly published the name *C. botrytis,* adopting the name *Ramaria* as a "Tribe" under the genus *Clavaria.* The 3 tribes proposed by Fries were based exclusively on fruiting body shape but later (Fries 1838), spore color was used as the basis of subdivision.

Bonorden (1851), Quélet (1888), and Ricken (1918) all used the name *Ramaria* as a genus for clavarioid fungi with branching habit.

Donk (1933) emended the genus to include branched species with colored spores. Gray's (1821) book, *Natural Arrangement of British Plants,* had dropped out of circulation and so was unknown to Donk. His emendment was *Ramaria* (Holmskj. ex Fr.) Bon. emend. Donk.

Rogers (1941) rediscovered Gray's work, established as a valid publication, post-Friesian by only a few months. It included Holmskjöld's 3 species of *Ramaria* but all were white-spored.

Petersen (1968) proposed the acceptance of *Ramaria* Holmskjöld per S.F. Gray typified with *R. coralloides* var *alba apicibus purpurascentibus.* The proposal by Donk (1949; 1964) to conserve the name *Ramaria* (Fr.) Bonorden was ratified by the Eleventh International Botanical Congress (Stafleu 1972), thus stabilizing the name *Ramaria.*

Doty (1948), using the positive macrochemical reaction with ferric sulphate, introduced a new key characteristic to distinguish *Clavariella* Karst. (Ramaria). The strongly cyanophilous spore walls of certain species of *Ramaria, Ramaricium,* and *Kavinia* was suggested by Ericksson (1954) as another distinguishing characteristic. This feature was later emphasized by Kotlaba and Pouzar (1964) and Petersen (1967).

Marr and Stuntz (1973) considered the genus to be distinguished by (1) branched habit, (2) colored spores, (3) positive ferric sulfate reaction, (4) cyanophilous spore ornamentation.

The genus is cosmopolitan, including 97 species. Corner (1950; 1970) has described the genus as follows: Fruiting bodies radially branched, generally colored, context often vinescent or rufescent. Spores pale yellow, ochraceous, cinnamon or ferruginous, the spore-wall colored, ellipsoid, smooth, striate, rough, rugulose, verruculose or echinulate. Basidia 4-spored. Cystidia and gloeocystidia absent. Hymenium thickening or not, often dorsiventral and sterile on the uppersides of the branches. The genus is divided into 3 subgenera: (1) *Lentoramaria*—dimitic or monomitic, generative hyphae frequently thick-walled, spores not echinulate; (2) *Echinoramaria*—monomitic, with thin-walled hyphae, spores echinulate or echinulate verrucose; and (3) *Ramaria*—monomitic, thin-walled hyphae, spores not echinulate.

Key to the Species of Ramaria

1. Hyphae in most of the fruiting body becoming thick-walled, clamped 2
1. Hyphae thin-walled, occasionally a few thick-walled in older parts of the fruiting body, clamped or not 4
2. Dimitic with skeletal hyphae in the basal mycelium 3
2. Monomitic throughout; dark brown, upper branches yellow-green; context tough, dense; spores dull ochraceous, 7-9 x 3.5-5.0 μm; coniferous habitat . . . . *R. stricta* p. 62
3. Fruiting bodies greyish orange, branch apices white; context tough, bruising dark brown; spores punctate-roughened, 5-10 x 3-4 μm; lignicolous, deciduous habitat . . . . *R. concolor* p. 39
3. Fruiting bodies pale buff or clay-colored, often tinged pale pink or flesh; context tough, unchanging; spores ovoid, minutely warted with warts in subspiral arrangement, 5-8 x 3-4 μm; terrestrial habit . . . . *R. gracilis* p. 51
4. Clamps at most septa 9
4. Clamps absent or only occasional 5
5. Context not firmly gelatinous 6
5. Context firmly gelatinous; fruiting bodies pale orange; spores 7-10 x 3.5-4.5 μm, ornamented with irregular warts . . . . *R. flavigelatinosa* p. 44
6. Fruiting bodies pinkish or reddish 7
6. Fruiting bodies otherwise 9
7. Fruiting bodies scarlet to bright red or melon, tips concolorous 8
7. Fruiting bodies pink, red, or pinkish yellow, branch tips light yellow; fasciculate with many slender trunks; context concolorous; spores 6.5-9.5 x 3-4 μm, minutely roughened to smooth . . . . *R. conjunctipes* p. 43
8. Fruiting bodies scarlet to bright red or light orange, context darker than the hymenium; spores 7-11 x 3-4 μm, finely verrucose . . . . . . *R. subbotrytis* p. 62
8. Fruiting bodies melon, context subconcolorous; spores 6.5-9 x 3-4.5 μm, asperulate . . . . *R. sandaracina* p. 56

9. Fruiting bodies 5-9 x 4-7 cm, yellowish white, branch tips pastel yellow, bruising dull vinaceous; context fleshy-fibrous to slightly gelatinous; spores 9-15 x 3.5-5.0 µm, with sinuous, faint spiral lines or grooves to nearly smooth . . . . . . *R. xanthosperma* p. 66
9. Fruiting bodies 2-6 x 1-4 cm, apricot yellow to light orange, sometimes bruising rufescent; context tough; spores 6-10 x 3.5-5.0 µm, minutely verrucose . . . . . . *R. suecica* p. 65
10. Spores striate 11
10. Spores rugulose, verrucose, varying to smooth 12
11. Spores 10-16 x 3-5.5 µm; fruiting bodies cream, terminal branches reddish or purplish, bruising vinaceous . . . . . . *R. botrytis* p. 36
11. Spores 9-14 x 3-4 µm; fruiting bodies cream, terminal branches dull red with an overall vinaceous tinge, no bruising reaction . . . . *R. rubripermanens* p. 56
12. Fruiting bodies pinkish to reddish orange 13
12. Fruiting bodies not as above 16
13. With bruising reactions 14
13. Without bruising reactions 15
14. Fruiting bodies salmon, tips concolorous, turning reddish brown with age or bruising; context spongy, fibrous; spores 8-12 x 3.5-5.0 µm, minutely roughened to faintly verruculose . . . . . . *R. secunda* p. 61
14. Fruiting bodies pinkish buff to orange-rose, tips yellow, bruising orange; context fleshy-fibrous drying chalky-friable; spores 8-15 x 4-6 µm, coarsely rugulose, verrucose . . . . . . *R. formosa* p. 48
15. Lower branches cream, terminal branches pinkish, quickly turning brown; spores 8-11.5 x 3-4.5 µm, ellipsoid with longitudinal rows of obscure warts . . . . . . *R. botrytoides* p. 39
15. Lower branches light orange, terminal branches bright pastel red; spores 11-24 x 3-4.5 µm, oblong-ellipsoid to subfusiform, finely ornamented to smooth . . . . . . *R. longissimispora* p. 52
16. Fruiting bodies yellow, ochraceous, orange 17
16. Fruiting bodies white, pale yellowish, cream, tan, brown 20
17. Fruiting bodies with short, compact, bright yellow branches, stipe white, massive, bruising orange; spores 7-15 x 3-4.5 µm, distinctly warted . . . . . . *R. magnipes* p. 53
17. Fruiting bodies with branches and stipe yellow, ochraceous or orange . . . 18
18. Fruiting bodies light orange, 5-10 x 3.5-9 cm; context pinkish white, bruising brown; spores 8.5-12 x 3.5-5.0 µm, cinnamon ochraceous, finely verruculose . . . . . . *R. formosa* var. *concolor* p. 48
18. Fruit-bodies deeply colored yellow to ochre or tinged orange, sometimes bruising brownish; branches usually elongate; spores finely rugulose to asperate . . . . . . *R. flavobrunnescens* p. 45
    a) spores 9-15 x 4-6 µm . . . . . . var. *formosoides* p. 47
    a) spores 7-11 x 3-5 µm . . . . . . (b)
    b) light yellow to ochre with deeper yellow tips . var. *flavobrunnescens* p. 45
    b) more or less orange . . . . . . var *aurea* p. 47
19. Fruiting bodies up to 20 cm tall, cream with light yellow tips; context fleshy-fibrous, bruising vinaceous; spores 10-15 x 3.5 µm, smooth . . . . . . *R. obtusissima* p. 55
19. Fruiting bodies up to 6 cm tall, golden brown with pale yellow tips, browning and withering with age; context cartilaginous, bruising umber brown; spores 8-12 x 3.5-5.0 µm, verruculose . . . . . . *R. fennica* p. 43

Ramaria botrytis (Pers. ex Fr.) Ricken

Vademecum, 253, 1918.

Clavaria botrytis Pers., Comm. Fung. Clavif., 174, 1797.
Clavaria botrytis Pers. ex Fr., Syst. Mycol. 1: 466, 1821.
Clavaria platyceras Viv., Fung. Ital., t. 54, 1834.
Clavaria purpurascens Paulet, Icon, Champ., 113: t. 194, 1855.
Ramaria acroporphyrea Quél., Flore. Mycol., 466, 1888.
Clavariella botrytis (Fr.) Schroet., Cohn, Krypt. Fl. Schles., Pilze 3: 477, 1888.
Clavaria sculpta Beck, Verh. K. Zool.-Bot. Ges. Wien, 39: 603, 1889.
Clavaria rielii Boud., Bull. Soc. Mycol. Fr. 13: 14, 1897.

botrytis (Gk)—a bunch of grapes

Figs 38, 39, 40

Fructifications: Gregarious, 7-15 x 4-11 cm, cream—4A3 (pale orange yellow—70), drying greyish orange—5B5 (light brown—57), tips greyish red—8B6 (greyish reddish—39) to oxblood red—9E6 (moderate reddish brown—43). Branches polychotomous, crowded, thick, much branched, mostly parallel becoming divergent towards the often cauliflower-like tips, many abortive branches, apices pluridigitate, subacute to rounded, axils rounded. Context white, bruising vinaceous, fleshy-fibrous drying hard. Stem simple, white then yellowish, thick and massive, 3-6 x 3-5 cm. Spore deposit greyish orange—6B5 (light brown—71). Taste mild. Odor not distinct. Terrestrial, in mixed woods, often under *Tsuga canadensis.*

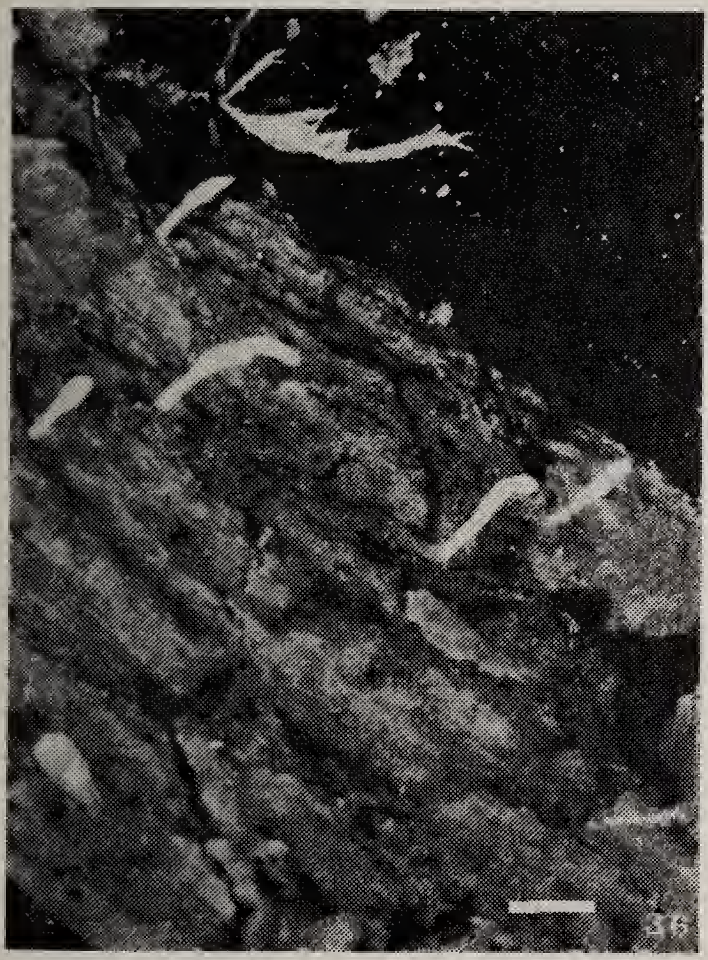
Macrochemical Tests: Positive color reactions with $FeSO_4$ and sometimes pyrogallol. No significant color change in α-naphthol, guaiac tincture, guaiacol, 2% phenol or aniline.

Microscopic Structures: Spores 10-16 x 3-5.5 μm, ochre, oblong-elliptic, finely striate. Basidia 40-70 x 4-7 μm, with 4 sterigmata 3-7 μm long. Hymenium 50-90 μm thick; subhymenium 15-20 μm. Clamp connections frequent.

Collections Examined: ACAD 12919, 25/8/77, Nicholsville, Kings Co.; ACAD 12920, 22/8/77, Moores Falls, Kings Co.; ACAD 12921, 12/9/77, Harrington woods, Kings Co.; ACAD 12922, 12/9/77, Harrington woods, Kings Co.; ACAD 12923, 23/9/77, Melanson ravine, Kings Co.

Discussion: This is the type species of the genus and one of the most easily recognized, but there has been much confusion as to its identity. The collections examined were closest to the description presented by Marr and Stuntz (1973) in which the species is distinguished by striate ornamented spores (12-18 x 4-6 μm), deep reddish or purplish terminal branches and a vinaceous bruising reaction. Corner's *R. holorubella,* which he separates from *R. botrytis* on the basis of spore morphology also fits this description. Marr and Stuntz (1973), after having examined the type of *R. holorubella* Atk., decided that the spore morphology of the 2 species was similar, thus making *R. holorubella* synonymous with *R. botrytis.*

Collection 12923, although similar in other characters, did not exhibit the vinaceous bruising reaction distinctive of the species, but this could have been a reflection of the age of the specimen.



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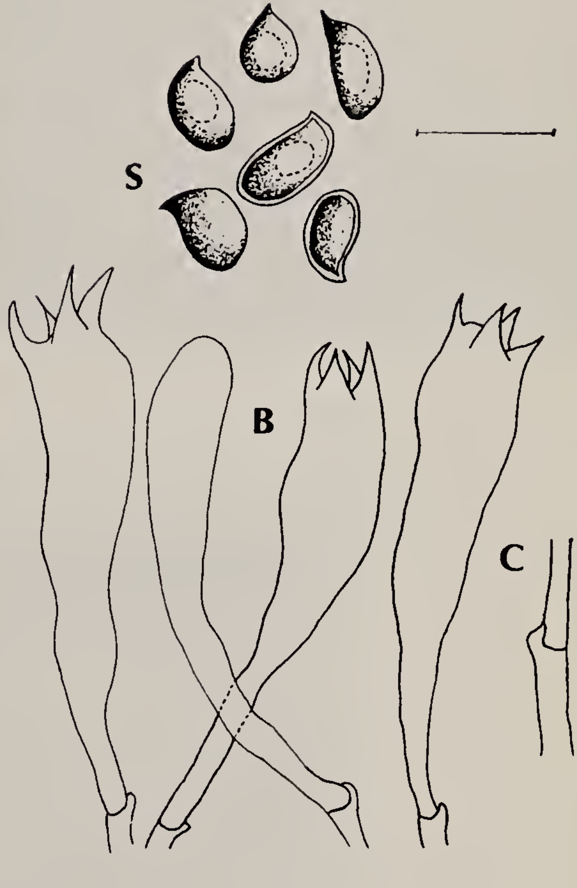

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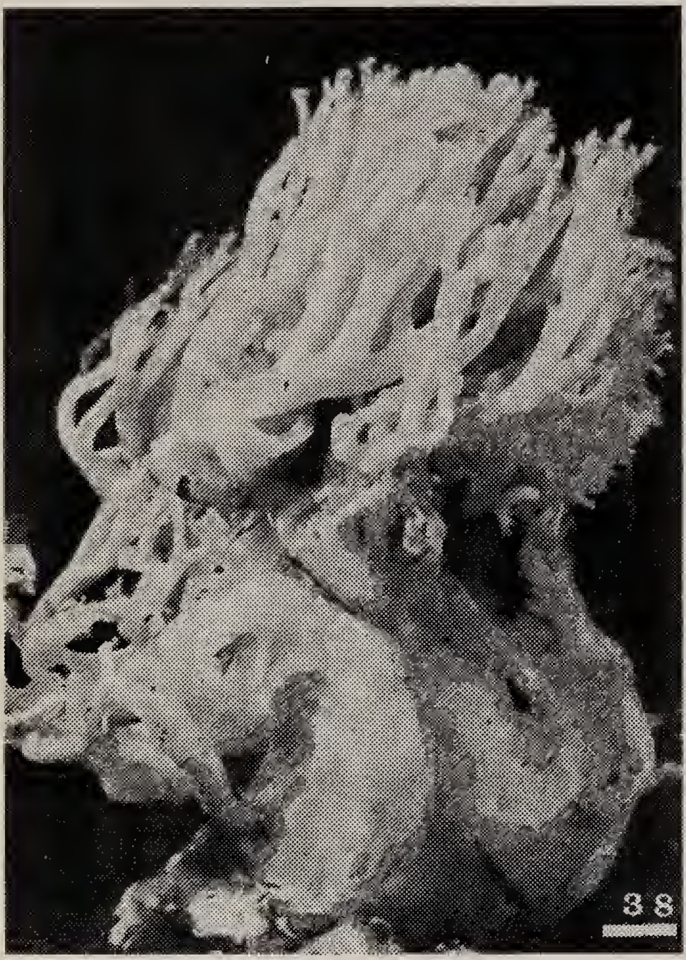
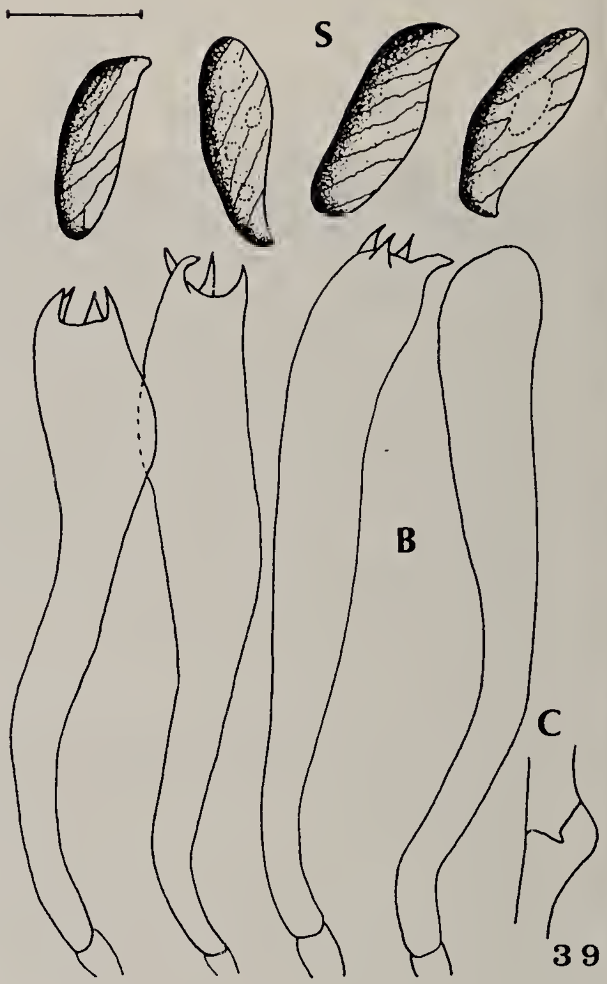
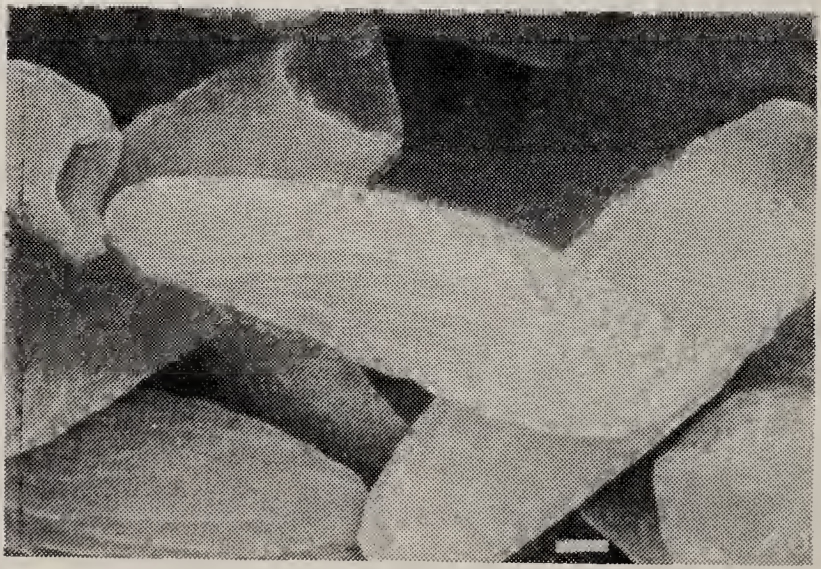
Figs 36, 37. *Lentaria mucida.*







Figs 38, 39, 40. *Ramaria botrytis.*

Ramaria botrytoides (Pk.) Corner

Ann. Bot. Mem. 1: 562, 1950.

Clavaria botrytoides Pk., Bull. N.Y. State Mus. 94: 21, 49, 1905.

botrytoides (Gk)—descended from or related to botrytis, a bunch of grapes.

Figs 41, 42, 43

Fructifications: Massive, 9-17 x 4-16 cm, cream 4A3 (pale orange yellow—73) to light orange—5A4 (light orange yellow—70), drying concolorous, tips and upper branches pinkish in youth but soon turning brown—6E8 (strong brown—55) with age. Branches polychotomous, branching at ground level, curving upright, the marginal branches acutely divaricate, rugose, much branched distally, axils rounded, apices pluridigitate, blunt, convoluted, slightly inflated. Context white, pinkish in upper branches, unchanging, form, turgid, brittle, drying somewhat elastic. Stem short, white 1-6 x 1-4 cm, somewhat pointed, rooting just below ground level, with numerous primordial branches arising from the base. Spore deposit greyish orange—6B5 (light brown—57). Odor sweet. Taste like raw new potatoes. Terrestrial, in mixed woods, sometimes under *Tsuga canadensis.*

Macrochemical Tests: Positive color reactions occurring with $FeSO_4$, pyrogallol, α-naphthol. No color reactions occurring in guaiac tincture, guaiacol, 2% phenol or aniline.

Microscopic Structures: Spores 8.0-11.5 x 3.0-4.5 μm, pale yellow, ellipsoid, rough, longitudinal rows of low obscure warts, indistinct lateral apiculus. Basidia 40-60 x 7-9 μm, with 4 sterigmata 4-6 μm. Hymenium 50-75 μm thick; subhymenium 10-20 μm. Contextual hyphae 5-10 μm broad. Clamp connections present.

Collections Examined: ACAD 12917, Harrington slope, Kings Co.; ACAD 12918, 23/9/77, Melanson ravine, Kings Co.

Discussion: Ramaria botrytoides is a common North American species (Corner 1950). Coker (1923) describes the taste and smell as that of green-pea hulls and has rated the fungus as "one of the most esteemed as an esculent." It is easily distinguished from *R. botrytis* and *R. rubripermanens,* which are macroscopically similar, by its smaller spores ornamented with longitudinal rows of low obscure warts and by the paler color of the branch tips.

Ramaria concolor (Corner) Petersen

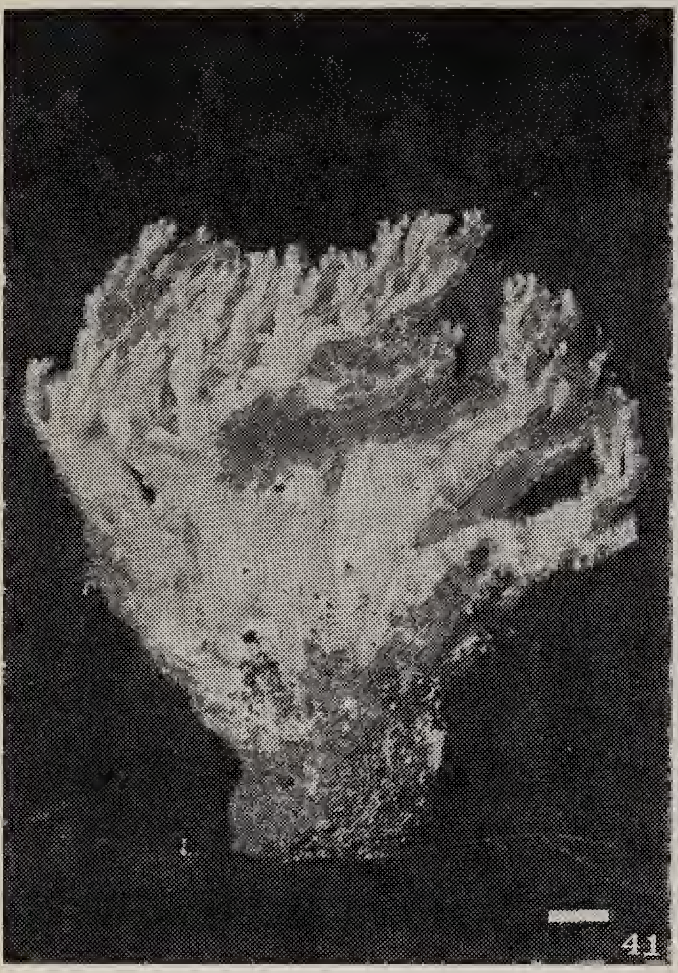
Bibl. Mycol. 43: 54, 1975.

Ramaria stricta var. *concolor* Corner, Ann. Bot. Mem. 1: 623, 700, 1950.

concolor (L)— of the same color

Figs 44, 45

Fructifications: Gregarious, 3-11 x 2-8 cm, greyish orange—5B4 (light brown—57), unchanging upon drying. Branches dichotomous, erect, parallel, numerous, axils obtuse, apices acute, single or bifid, white. Context white, bruising dark brown—6F8 (deep brown—56) when cut, tough. Stem distinct, 0.5-4 cm long, pale mycelioid, arising from a white woolly basal tomentum, long white thread-like rhizomorphs extending into the wood. Spore deposit greyish orange —5B4 (light brown—57). Taste absent. Odor sweet or faintly of anise. Lignicolous, common mixed or deciduous woods, usually growing on hardwood.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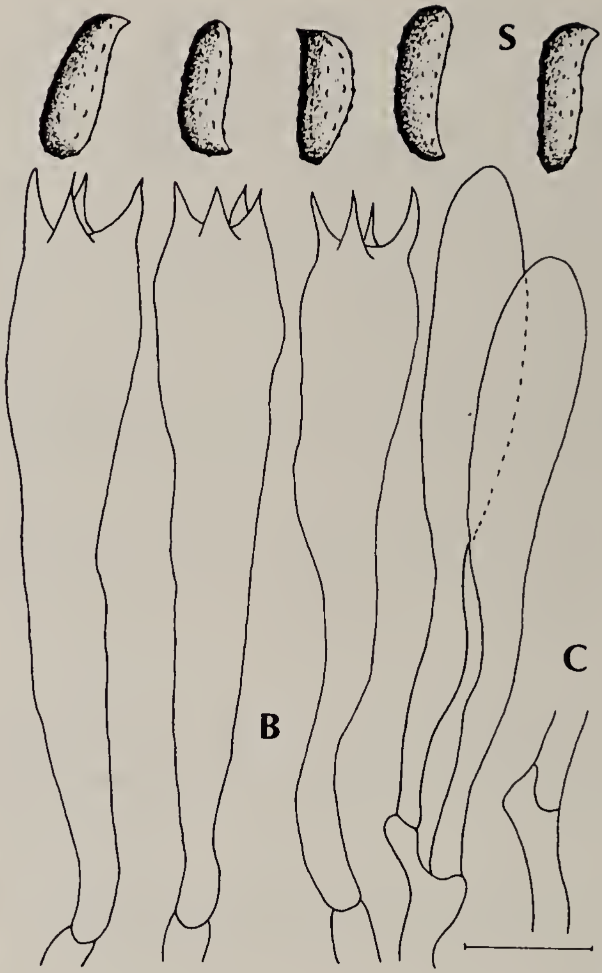

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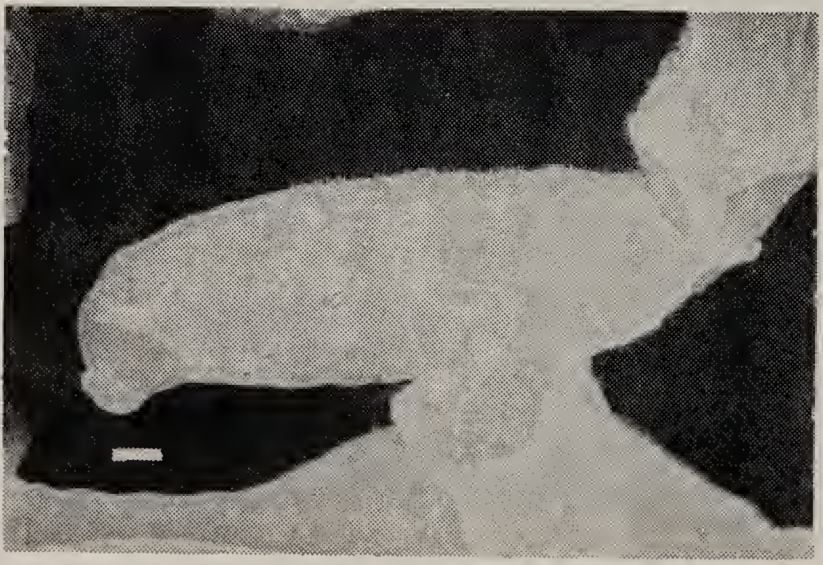
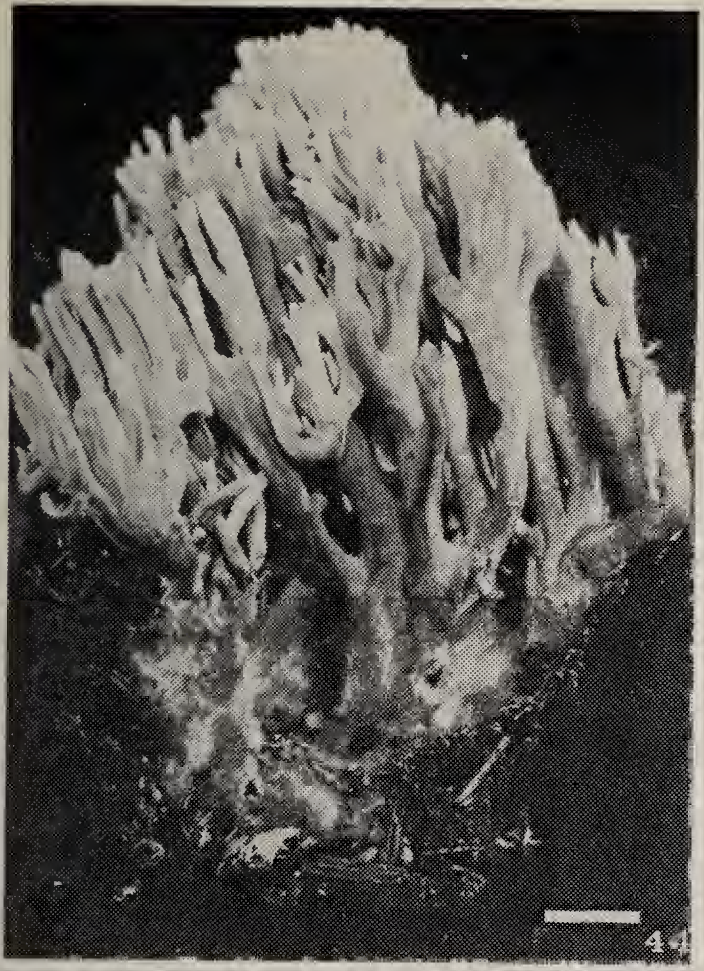
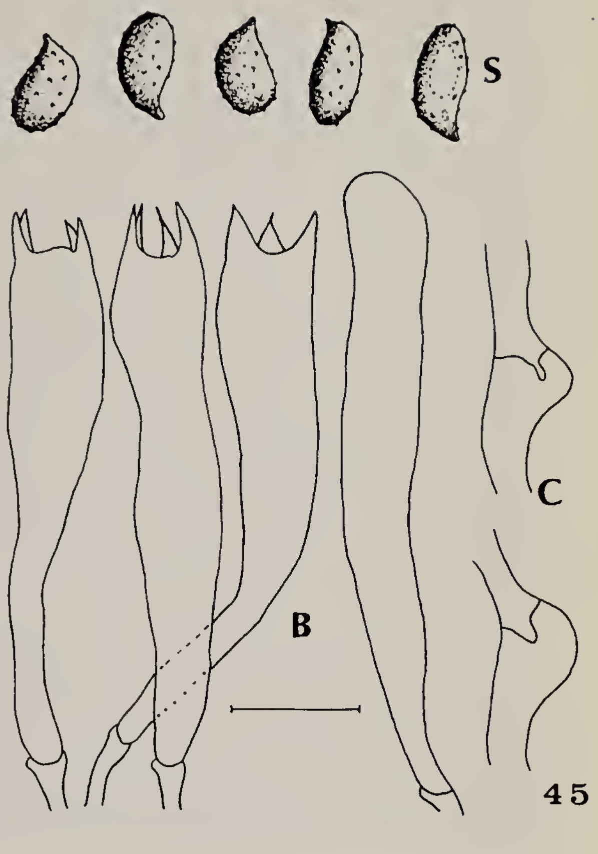


Figs 41, 42, 43. *Ramaria botrytoides.*





Figs 44, 45. *Ramaria concolor.*

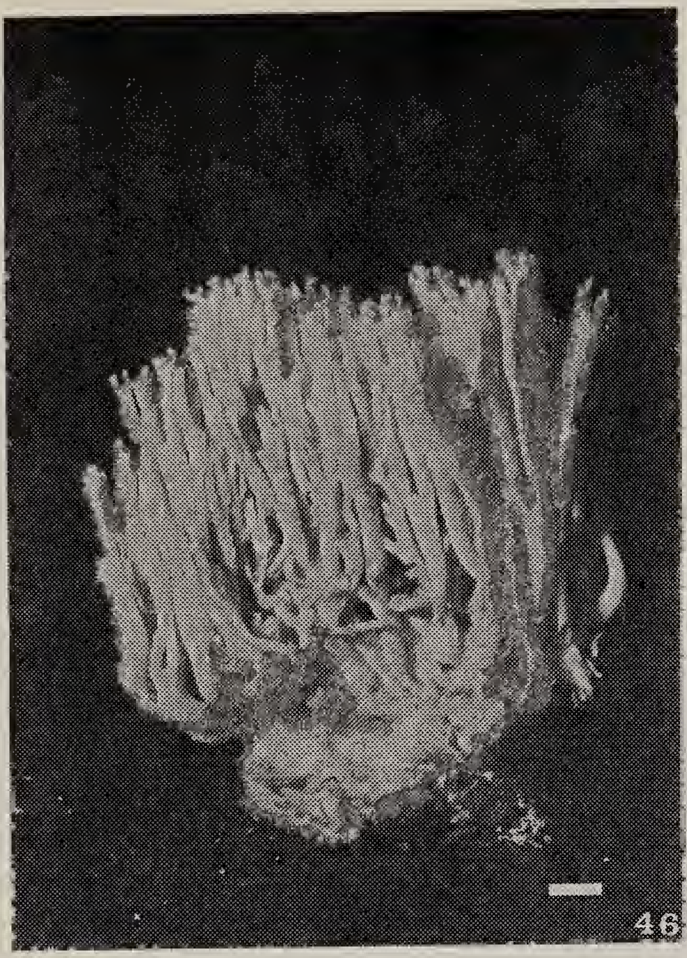
Macrochemical Tests: Positive color reactions with $FeSO_4$. Other chemicals did not give consistent, reliable results.

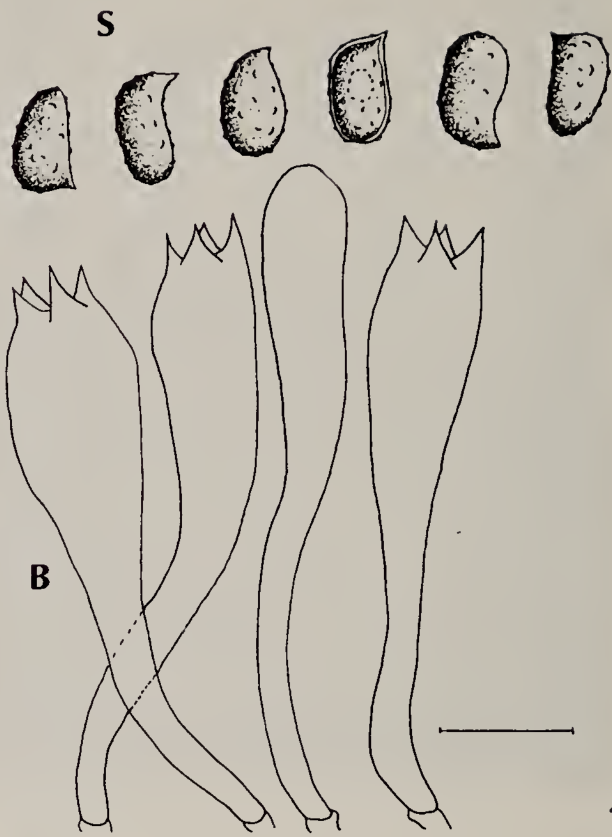
Microscopic Structures: Spores 5-10 x 3-4.5 μm, ochre, oblong or pip-shaped, punctate-roughened. Basidia 35-50 x 6.5-8μm, with 4 sterigmata 5-6 μm. Hymenium 45-50 μm, thickening; subhymenium 10-25 μm. Contextual hyphae of 2 types, thin-and thick-walled generative hyphae 3-10 μm wide, walls of thick-walled hyphae 1-3 μm; subhymenial hyphae 2-4 μm, thin-walled; rhizomorphs containing skeletal hyphae, walls 1-2 μm thick. Clamp connections abundant.

Collections Examined: ACAD 12959, 15/8/77, Scots Bay, Kings Co.; ACAD 12960, 22/8/77, Moores Falls, Kings Co.; ACAD 12961, 26/8/77, Scots Bay, Kings Co.; ACAD 12962, 26/8/77, Scots Bay, Kings Co.; ACAD 12963, 4/9/77, Agriculture Canada Experimental Station, Kentville, Kings Co.; ACAD 12964, 19/9/77, Caseys Corner, Kings Co.; ACAD 12965, 12/9/77, Harrington woods, Kings Co.; ACAD 12966, 1/8/77, Harrington woods, Kings Co.

Discussion: Ramaria concolor is a common species frequently found growing along the length of fallen logs. Its distinctive features include a lignicolous habit, punctate-roughened spores and white ropy rhizomorphs penetrating the substratum.

Until Petersen (1975) raised *R. concolor* to specific status, it was considered as a variety of *R. stricta.* The 2 species are found in overlapping ranges and are often confused. *R. concolor* may be distinguished from *R. stricta* by its generally larger size, tighter closer branching habit, pallid or whitish branch tips and its typical association with deciduous wood.





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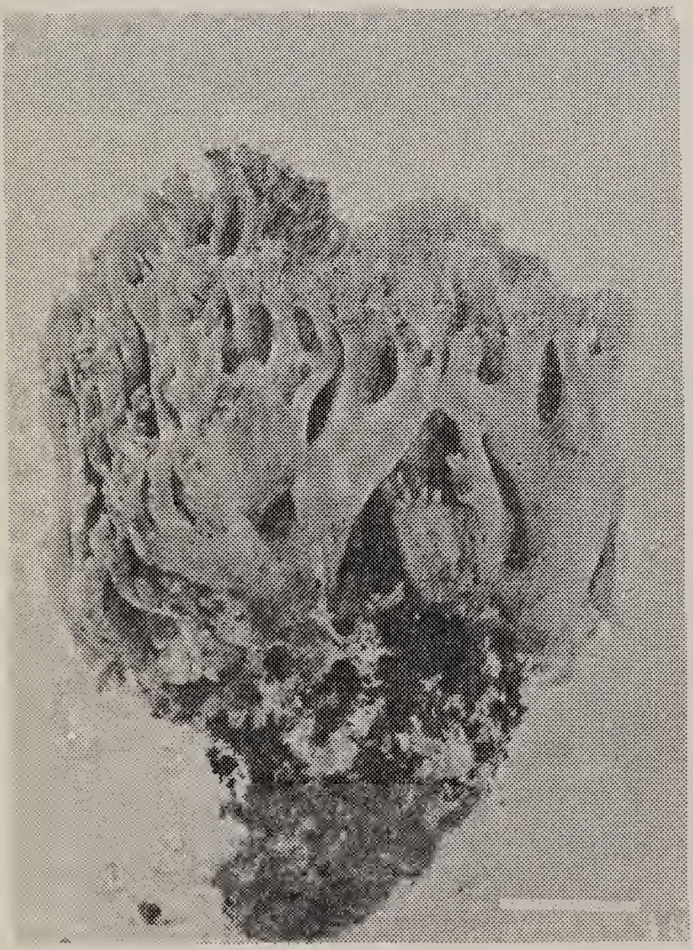
Figs 46, 47. *Ramaria conjunctipes.*



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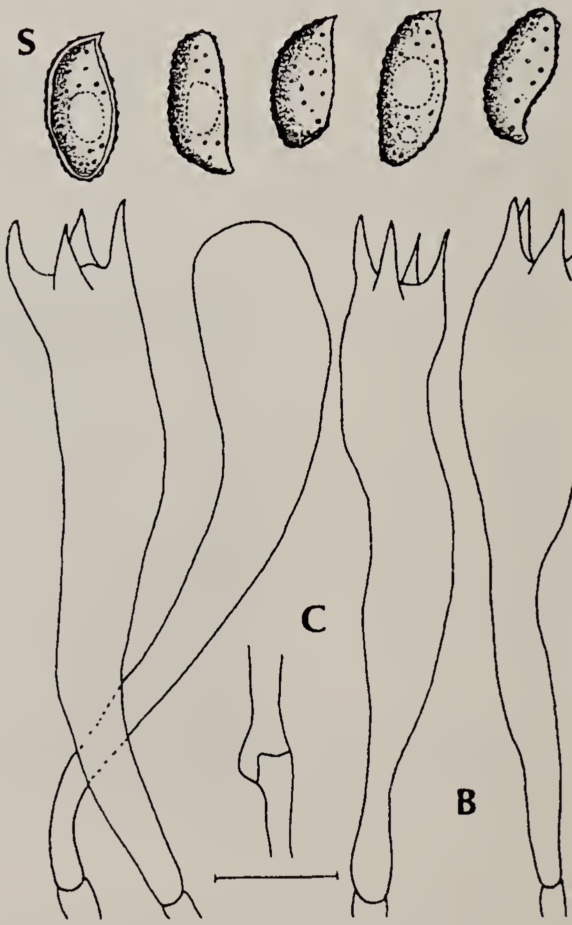

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Figs 48, 49. *Ramaria fennica.*

Ramaria conjunctipes (Coker) Corner

Ann. Bot. Mem. 1: 567, 1950.

Clavaria conjunctipes Coker, Clav. U.S. Can., 131, t. 43, 91, 1923.

conjunctipes—conjunctus (L)—connected
pes (L)—foot

Figs 46, 47

Fructifications: Gregarious, light orange 5A2 (pale orange yellow—73), drying apricot—5B6 (moderate orange yellow—71), branch tips light yellow—5A3 (pale orange yellow—73), 4-15 x 3-7 cm. Branches dichotomous, subparallel, elongated, axils narrowly rounded, apices bifid, subacute. Context concolorous, unchanging when bruised, fleshy fibrous, drying slightly brittle. Stem multiple, white, slender, mycelioid, 1-3 x 0.5-1.5 cm. Spore deposit golden yellow. Taste and odor absent. Terrestrial, in moss or humus in coniferous woods.

Macrochemical Tests: No color changes occurring in pyrogallol, α-naphthol, guaiac tincture, guaiacol, 2% phenol or aniline. Positive reaction with $FeSO_4$.

Microscopic Structures: Spores 6.5-9.5 x 3.4 μm, ochre, ovate or short ellipsoid, minutely roughened to smooth. Basidia 30-45 μm x 5-9 μm; 4 sterigmata, 3-5 μm long. Hymenium 40-55 μm thick; subhymenium 15-20 μm, cells short and inflated, walls slightly thickened, hyphae 3-4 μm broad. Contextual hyphae 6-7 μm broad. Clamp connections absent.

Collections Examined: ACAD 12925, 29/9/77, Melanson ravine, Kings Co.; ACAD 12926, 25/9/77, Melanson ravine, Kings Co.; M-102, 18/10/64, Big River, Wash.

Discussion: The pink color of the fruiting body with the yellow branch tips gives this species a close resemblance to *R. formosa.* It is easily separated, however, by its shorter, smoother spores, the numerous slender stems and the tougher texture of the context, which does not dry chalky-friable.

Ramaria conjunctipes may also be confused in the field with *R. sandaracina,* but microscopically it is distinguished by the absence of clamp connections.

Ramaria fennica (Karst.) Ricken

Vademecum, 264, 1920.

Clavaria fennica Karst., Nat. Sallsk. Fauna Flora Fenn. 9: 372, 1868.
C. testaceoflava Bres. var. *testaceoviridis* Atk., Ann. Mycol. 6: 58, 1908.
C. testaceoviridis Doty, Clav. Pac. N.W., 47, 1944.

fennica—Fennia (L)—Finland

Figs 48, 49

Fructifications: Up to 6 cm tall, champagne—4B4 (greyish yellow—90), drying concolorous, tips light yellow—4A4 (pale orange yellow—73), browning with age and withering. Branches polychotomous, smooth, mostly parallel, stout and compact, becoming hollow, axils of lower branches rounded, upper branches acute, apices pluridentate. Context white, bruising brown—6E8 (strong brown—55), fleshy-cartilaginous, drying hard and brittle. Stem up to 2 cm high, stout, violaceous white at the base, mycelioid. Spore deposit greyish orange—6B5 (light brown—57). Taste bitter. Odor absent. Terrestrial, in coniferous or deciduous woods.

Macrochemical Tests: No significant color reactions in α-naphthol, guaiac tincture, guaiacol, 2% phenol, aniline. Positive reactions with $FeSO_4$, pyrogallol and KOH.

Microscopic Structures: Spores 8-12 x 3.5-5μm, mostly 10 x 4 μm, buff, elliptical, sometimes curved, verruculose, multiguttate, apiculus conspicuous. Basidia 40-60 μm; 4 sterigmata, 3-5 μm long. Hymenium 50-75 μm thick with embedded spores; subhymenium 10-20 μm thick. Contextual hyphae 4-6 μm broad, slightly thickened walls; subhymenial hyphae 2-3 μm. Clamp connections frequent.

Collections Examined: ACAD 12971, 25/8/77, Nicholsville, Kings Co.; ACAD 645, 4/9/32, Scots Bay, Kings Co.; M-526, 7/11/66, Mason Lake, near Shelton, Wash.

Discussion: The distinctive characters of this species are its small size, the golden brown branches with fine, pale yellow-green tips drying concolorous, the umber brown bruising reaction, and the bitter taste. *Ramaria fennica* along with other members of this group of closely related taxa, i.e. *R. fumigata, R. bataillei,* respond to application of 10% KOH to the lower branches with a red color change in fresh specimens and a rust brown reaction in dried specimens. This diagnostic reaction seems to be associated with a violet pigment which serves as a natural indicator, changing color in response to pH changes (Marr & Stuntz, 1973).

Ramaria flavigelatinosa Marr & Stuntz

Bibl. Mycol. 38: 81, 1973.

flavigelatinosa— flavus (L)—yellow
gelatinosus (L)—jelly-like

Figs 50, 51

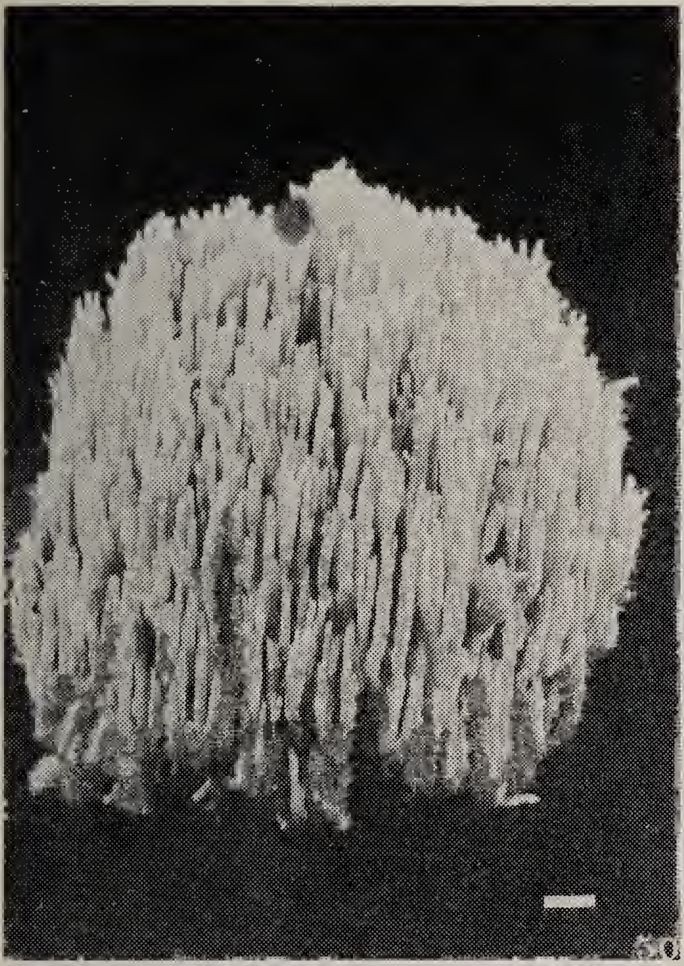
Fructifications: 6-12 x 8-15 cm, pale orange—5A3 (pale orange yellow—73), cream—4A3 (pale orange yellow—70) upon drying. Branches parallel, smooth, lower branches polychotomous and connate, upper branches usually dichotomous and free, axils rounded, apices subacute to rounded, forked or pluridigitate. Context translucent, white at the base, context of the branches concolorous, firmly gelatinous when fresh, drying rather pliable. Stem white, multiple, 1-2 x 2-3 cm. Spore deposit apricot yellow—5B6 (moderate orange—53). Taste absent. Odor fabaceous. Terrestrial, in mixed woods under *Tsuga canadensis.*

Macrochemical Tests: No positive color changes in α-naphthol, guaiac tincture, guaiacol, 2% phenol, analine. Positive reaction observed for $FeSO_4$.

Microscopic Structures: Spores 7-10 x 3.5-4.5 μm, buff, subcylindrical, ornamented with irregular warts, 1-3-guttate. Basidia 45-60 x 7-9 μm; 4 sterigmata, 4-6 μm long. Hymenium 80-100 μm thick, subhymenium 20-30 μm. Contextual hyphae 4-12 μm broad, interwoven in stipe, closely packed and parallel in branches, gelatinous matrix present; subhymenial hyphae 2.5-4.0 μm. Clamp connections absent. Gloeoplerous hyphae present.

Collections Examined: ACAD 12927, 31/8/77, West Gaspereau, Kings Co.

Discussion: Ramaria flavigelatinosa is easily recognized by the translucent, gelatinous quality of the flesh. *R. gelatinosa* (Coker) Corner differs in the red pigmentation, the hard brittle consistency of the dried flesh and in the presence of clamps.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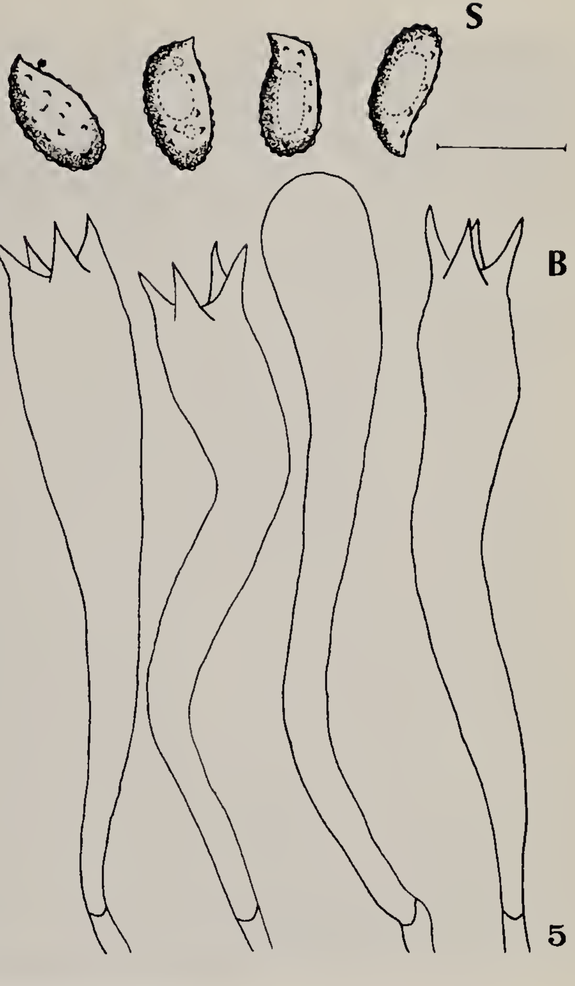


51

Figs 50, 51. *Ramaria flavigelatinosa.*

Ramaria flavobrunnescens (Atk.) Corner var. flavobrunnescens

Ann. Bot. Mem. 1: 581, 1950.

Clavaria flavobrunnescens Atk., Ann. Mycol. 7: 367, 1909.

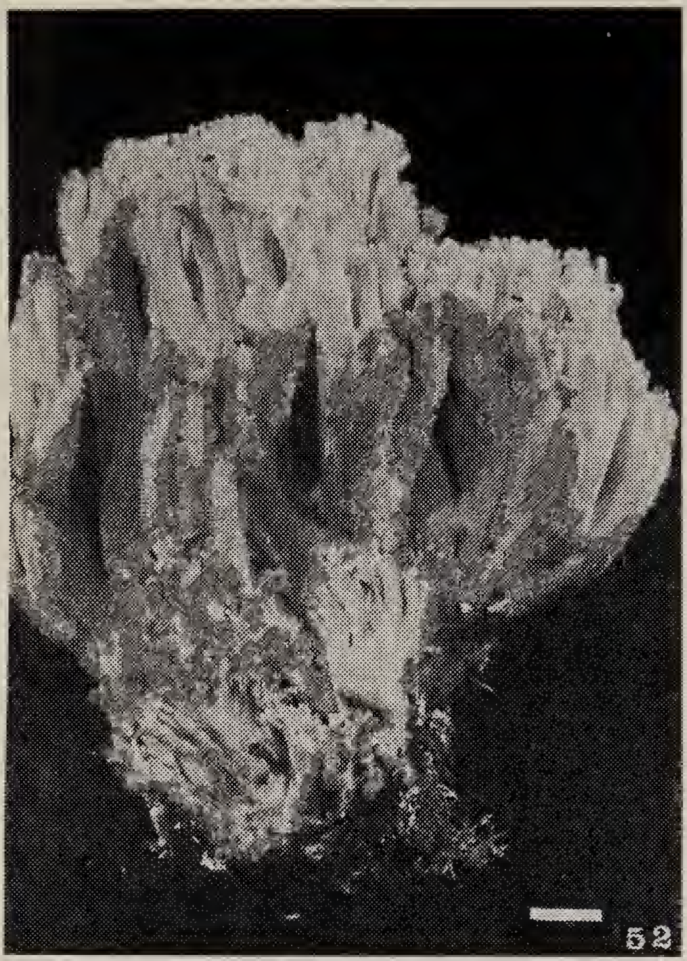
flavobrunnescens— flavus (L)—yellow
brunneus (L)—brownish

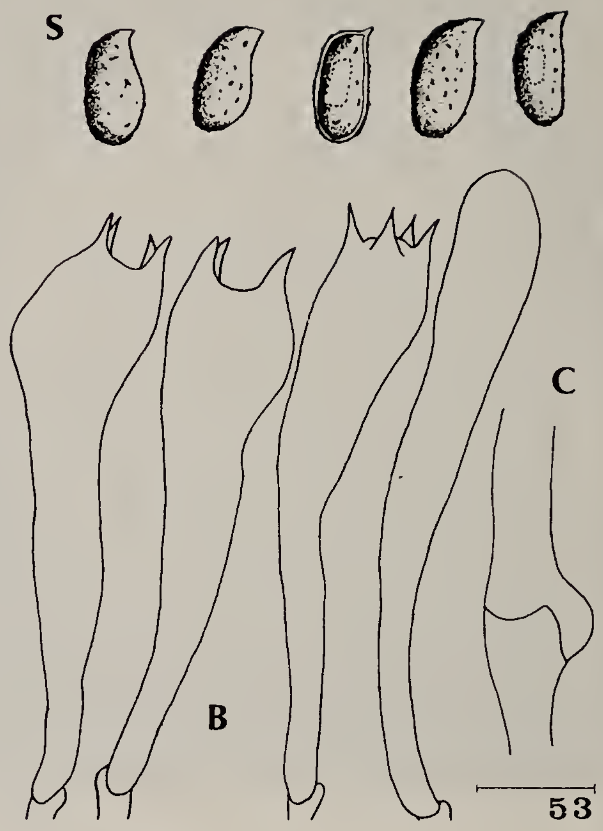
Figs 52, 53

Fructifications: Gregarious, 4-13 x 3-6 cm, light yellow—4A4 (pale orange yellow—73) to yellowish orange—4A7 (vivid yellow—82), tips dark yellow—4A8 (vivid yellow—82), turning brown on withering or bruising. Branching at ground level, mostly parallel or diverging slightly, internodes lengthening up to 3.5 cm in lower branches, upper branches short and much thickened, brush-like in appearance, polychotomous, axils acute, apices pluridigitate, blunt or cuspid. Context pale concolorous, watery with age, sometimes bruising brownish, firm to brittle, drying somewhat elastic. Stem 1-4 x 0.5-2.0 cm, usually single, white, cylindrical, tapering, felt-like mycelioid, with short abortive or primordial branches at the base. Spore deposit greyish orange—6B5 (light brown—57). Taste mild. Odor fungal. Terrestrial, in coniferous or deciduous woods.

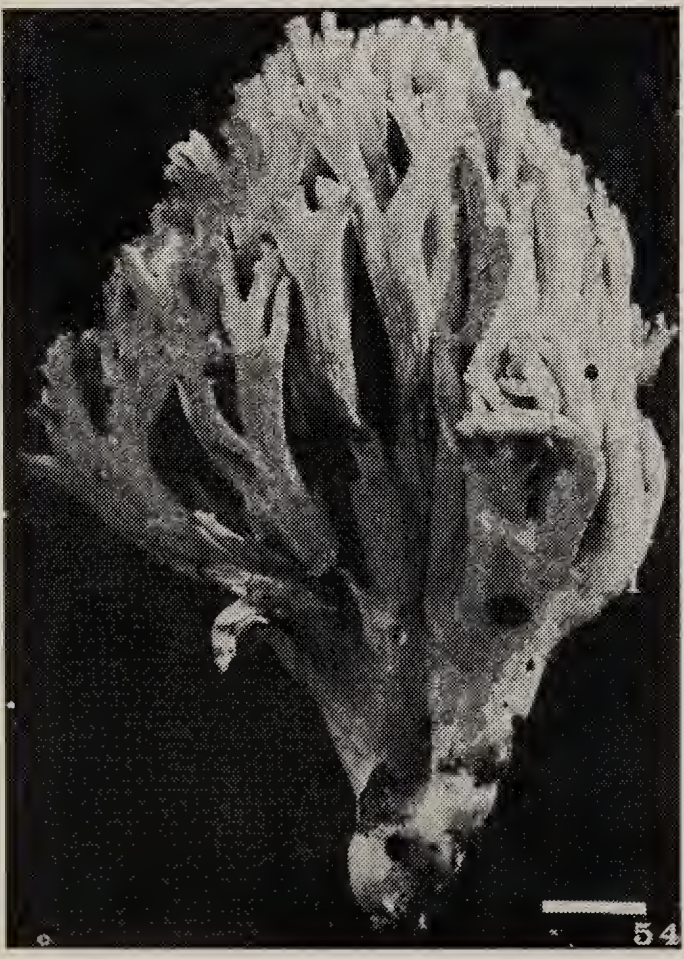
Macrochemical Tests: No significant color reactions occurring in pyrogallol, α-naphthol, guaiac tincture, guaiacol, 2% phenol or aniline. Positive color reaction occurring with $FeSO_4$.

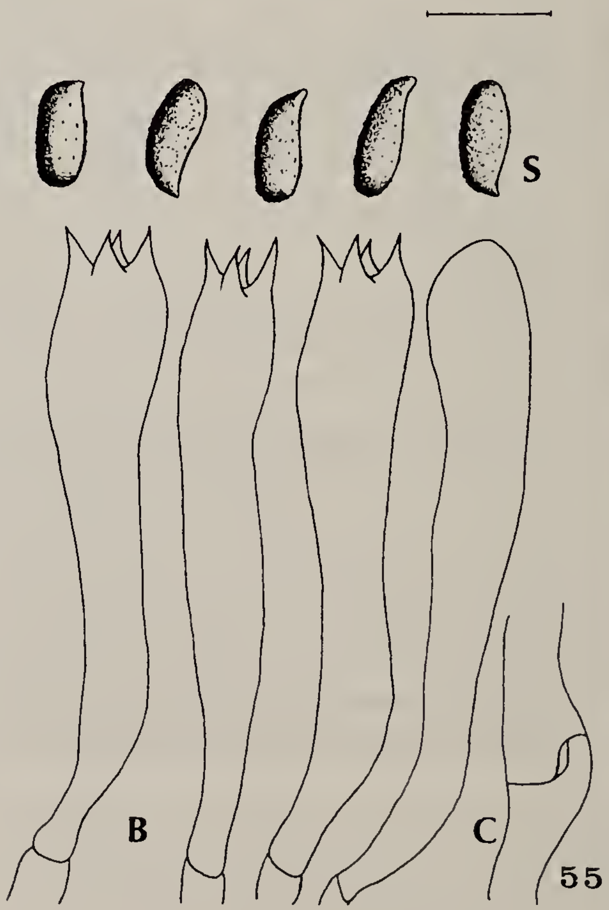
Microscopic Structures: Spores 7-11 x 3-5 μm, pale yellow, ellipsoid, faintly roughened, asperate to nearly smooth. Basidia 40-55 μm, basally clamped; 2-4 sterigmata, 3-6 μm long. Hymenium 40-70 μm thick, subhymenium 10-15 μm. Con-





Figs 52, 53. *Ramaria flavobrunnescens* var. *flavobrunnescens*.





Figs 54, 55. *Ramaria flavobrunnescens* var. *aurea*.

textual hyphae 4-10 μm broad, occasionally inflating; subhymenial hyphae 2-3 μm. Clamps frequent. Gloeoplerous hyphae present.

Collections Examined: ACAD 12928, 29/8/77, Melanson ravine, Kings Co.; ACAD 12929, 25/8/77, Nicholsville, Kings Co.; ACAD 12930, 25/8/77, Nicholsville, Kings Co.; ACAD 12931, 8/9/77, Black Hole, Kings Co.; ACAD 12932, 26/8/77, Scots Bay, Kings Co.; ACAD 12933, 23/8/77, Black Hole, Kings Co.; ACAD 12934, 7/9/77, Harrington slope, Kings Co.; ACAD 12935, 25/8/77, Nicholson, Kings Co.; ACAD 5045, 11/9/59, Harrington Road, Kings Co.; ACAD 607, 15/7/30, Agricultural Canada Experimental Station, Kentville, Kings Co.; ACAD 12936, 25/8/77, Nicholsville, Kings Co.; ACAD 12937, 25/8/77, Nicholsville, Kings Co.; ACAD 5040, 4/9/59, Odell Park, Fredericton, N.B.

Ramaria flavobrunnescens (Atk.) Corner

Ann. Bot. Mem. 1: 581, 1950.

var. aurea Coker

Clav. U.S. Can., 124, 1923.

Figs 54, 55

Fructifications: 9 x 6 cm, light orange—5A2 (pale orange yellow—73), branch tips pastel yellow—2A4 (pale greenish yellow—104).

Macrochemical Tests: Similar to var. *flavobrunnescens*. A faint reaction with pyrogallol and α-naphthol was observed.

Microscopic Structures: Spores 7-10 x 3-4 μm, ellipsoid-oblong, faintly roughened or nearly smooth, pale yellow.

Collections Examined: ACAD 12940, 2/9/77, Harrington slope, Kings Co.

Discussion: Ramaria flavobrunnescens is a common, widely distributed and variable species. The clear, rich yellow pigmentation and the brush-like stiff appearance of the branches serve to identify the species in the field. Var. *formosoides* is distinguished by its larger spores (9-15 x 4-6 μm). Var. *aurea* has smaller spores (7-10 x 3-4 μm) and smaller orange fruit bodies with pale yellow branch tips. Wehmeyer (1935) has described this variety from Nova Scotia under *C. flava* var. *aurea*. The rancid unpleasant smell and the reddish vinaceous tips that he described were not evident in ACAD 12940.

Ramaria flavobrunnescens (Atk.) Corner

Ann. Bot. Mem. 1: 581, 1950.

var. formosoides Corner

Nova Hedwigia 33: 274, 1970.

Figs 56, 57, 58

Fructifications: Similar to var. *flavobrunnescens* except that the branch tips are concolorous.

Macrochemical Tests: Identical to var. *flavobrunnescens*.

Microscopic Structures: Spores 9-15 x 4-6 μm, pale yellow, ellipsoid, finely rugulose. Clamp connections present but inconspicuous.

Collections Examined: ACAD 12938, 29/8/77, West Gaspereau, Kings Co.; ACAD 12939, 18/8/77, Lequille, Annapolis Co.; ACAD 5038, 19/9/59, Glenmont, Kings Co.

Ramaria formosa (Pers. ex Fr.) Quél.

Flore Mycol., 466, 1888.

Clavaria formosa Pers., Icon. Descr. 1: 3, 1798.
Clavaria formosa Pers. ex Fr., Syst. Mycol. 1: 466, 1821.
Clavariella formosa (Fr.) Karst., Hattsv. Ryssl. 2: 185, 1882.
Clavaria formosula Britz., Hym., Südb. 8: 287, 1885.

formosa (L)—handsome

Figs 59, 60

Fructifications: Gregarious, 6-20 x 1.5-8.0 cm, melon—5A7 (moderate orange yellow—71), drying light orange—5A4 (light orange yellow—70), tips light yellow—3A5 (light yellow—86). Branches parallel, polychotomous below, ultimately bifid, smooth or longitudinally rugulose, axils rounded, apices blunt to rounded. Context white or subconcolorous, sometimes bruising light orange—5A5 (light orange yellow—70), fleshy-fibrous drying chalky friable. Stem multiple, 1.5-4.0 x 0.5-2.0 cm, whitish at base, finely mycelioid. Spore deposit greyish orange—6B5 (light brown—57). Taste bitter. Odor not distinct. Terrestrial, frequent in mixed woods, often under *Tsuga canadensis*.

Macrochemical Tests: Positive color reactions with $FeSO_4$, pyrogallol, α-naphthol, guaiac tinture, guaiacol 2% phenol. Aniline resulted in a positive test in 50% of the applications.

Microscopic Structures: Spores 8-12 x 3-6 μm, buff, distinctly roughened with coarse, scattered warts, oblong-ellipsoid, 1-3-guttate. Basidia 40-55 x 5-8 μm; 4 sterigmata, 3-5 μm long. Hymenium 45-60 μm, not thickening; subhymenium 15-20 μm. Contextual hyphae 4-10 μm wide, cells long, with slightly thickened walls, compact; few thick-walled gloeoplerous hyphae 3 μm wide; subhymenial hyphae 2-3.5 μm. Clamp connections present but sometimes obscure.

Collections Examined: ACAD 12941, 18/8/77, Lequille, Annapolis Co.; ACAD 12942, 22/8/77, Moores Falls, Kings Co.; ACAD 12943, 24/8/77, West Gaspereau, Kings Co.; ACAD 12944, 12/9/77, Harrington woods, Kings Co.; ACAD 12945, 25/8/77, Nicholsville, Kings Co.; M-513B, 7/11/66, Mason Lake, near Shelton, Wash.

Ramaria formosa (Pers. ex Fr.) Quél.

Flore Mycol., 466, 1888.

var. concolor var. nov.

concolor (L)—of the same color.

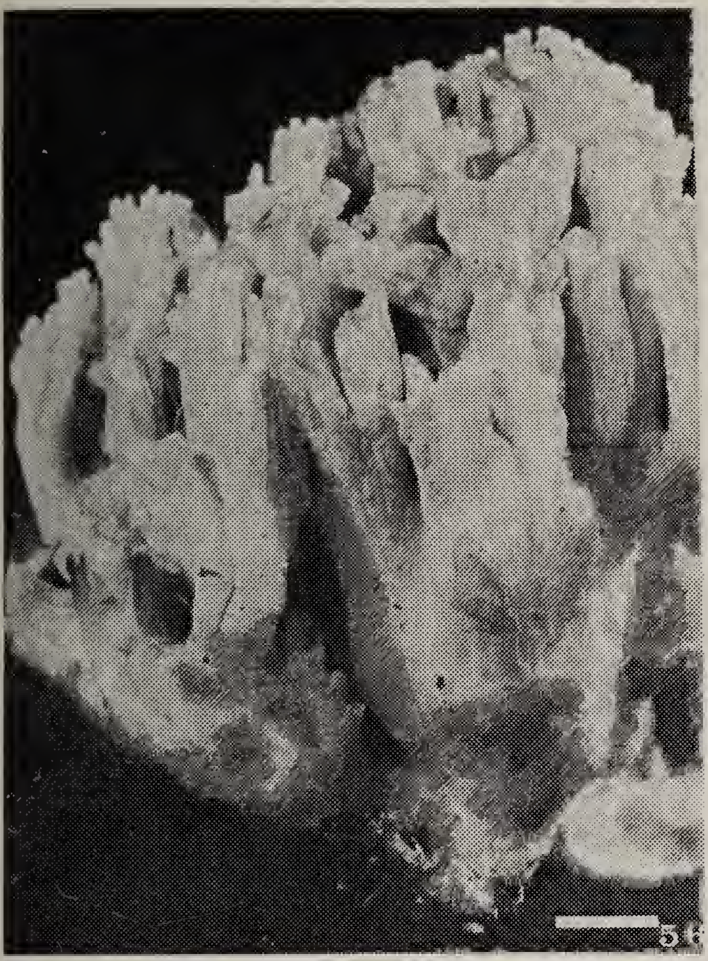
Figs 61, 62

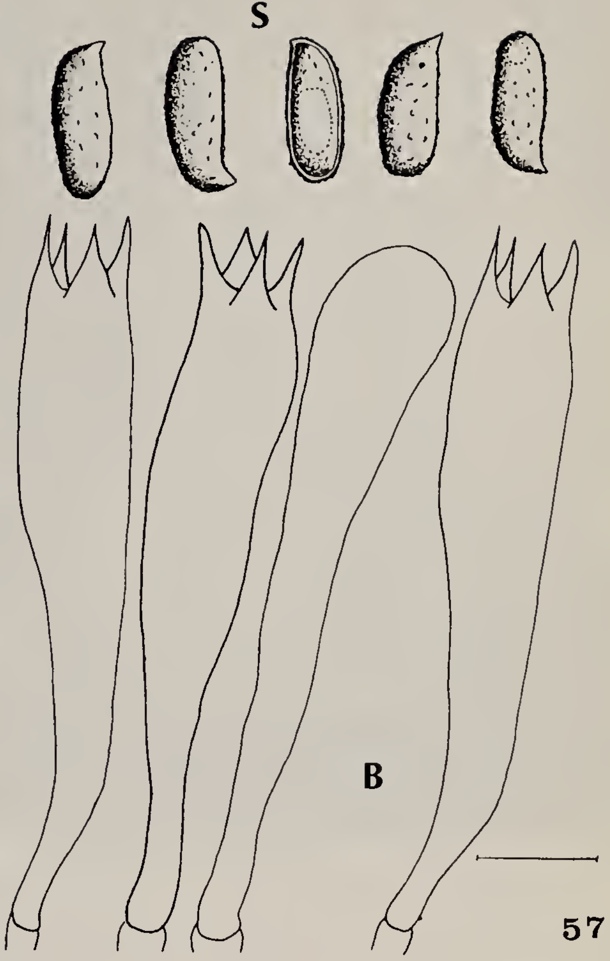
Ad 5-10 x 3.5-9 cm, basi multiramosa, armeniae, apicibus concoloribus; ramis polychotomis; carnea. Sporae 9-14 x 4-5.5 μm, ochraceae, ellipsoideae, subverruculosae.

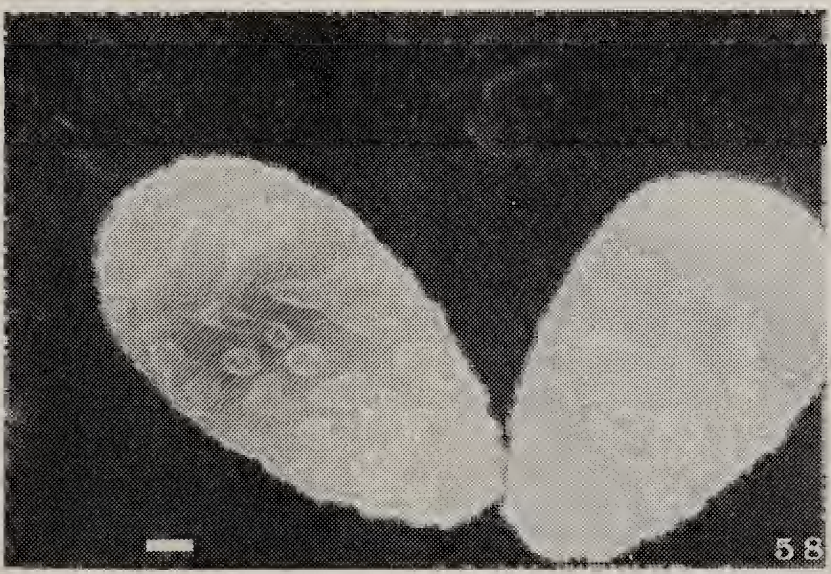
Typus ACAD 12968 in sylvis prope Nicholsville, comitato Kings, Nova Scotia lectus, holotypus in herbario Universitatis Acadiae (ACAD) conservatus.

A typo differt praecipue apicibus concoloribus.

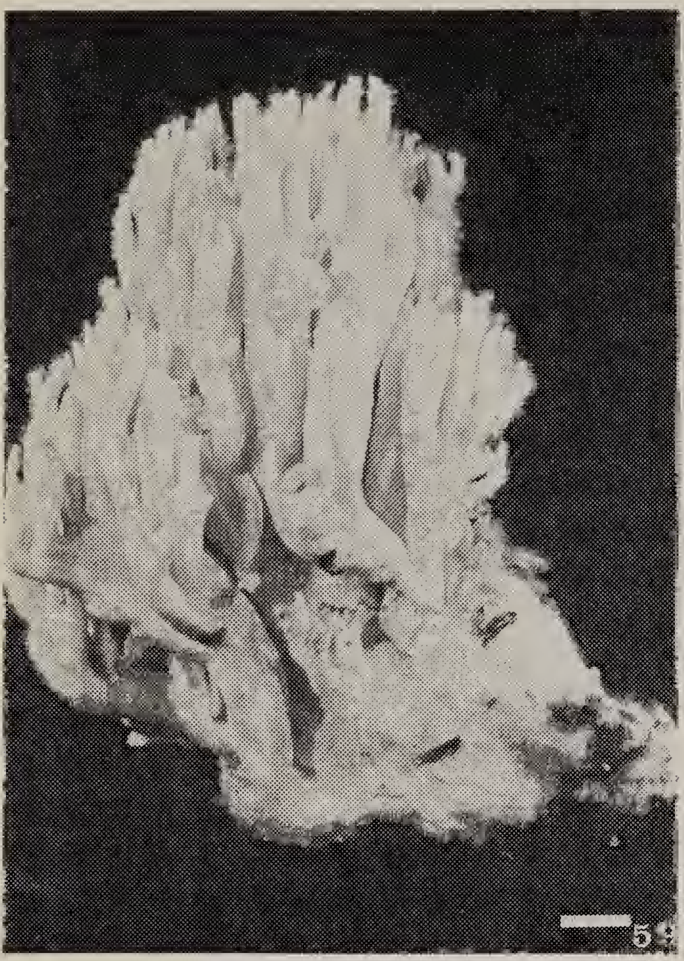
Fructifications: 5-10 x 3.5-9 cm, light orange—5A4 (light orange—52), drying golden wheat—4B5 (moderate yellow—87), tips concolorous, browning with age. Branches polychotomous, numerous, moderately rugulose, branching just above

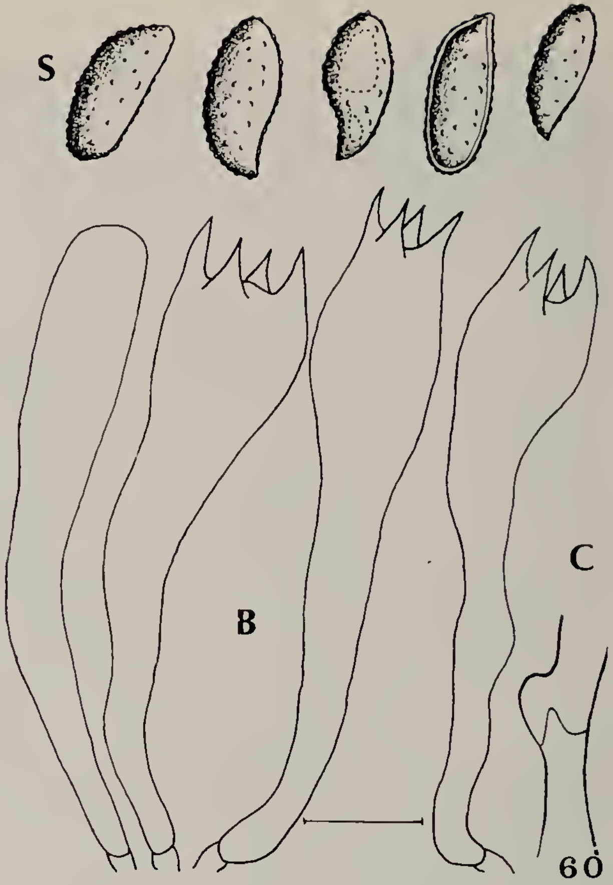




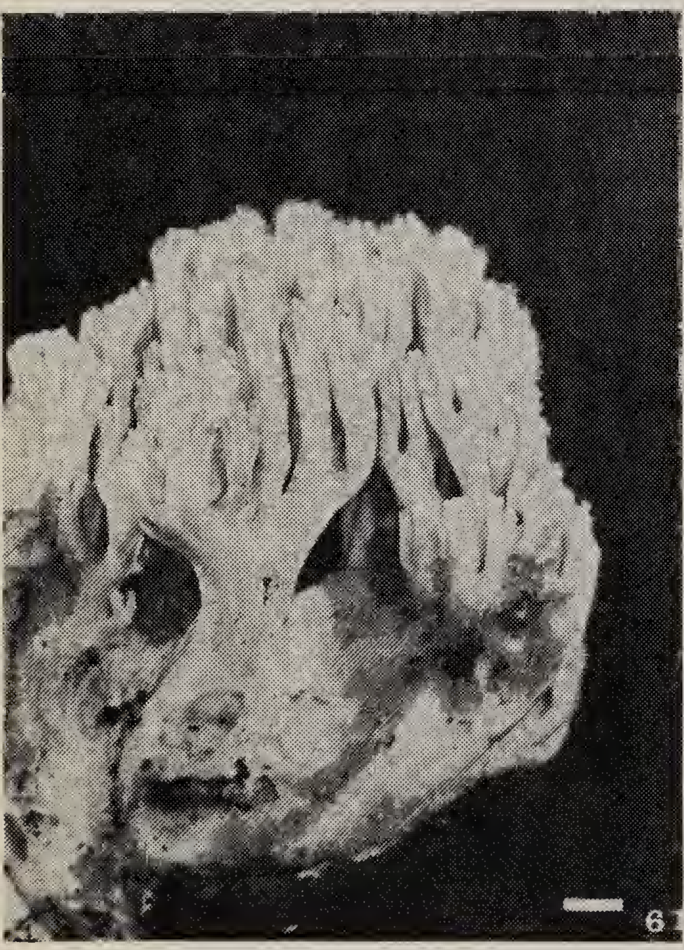


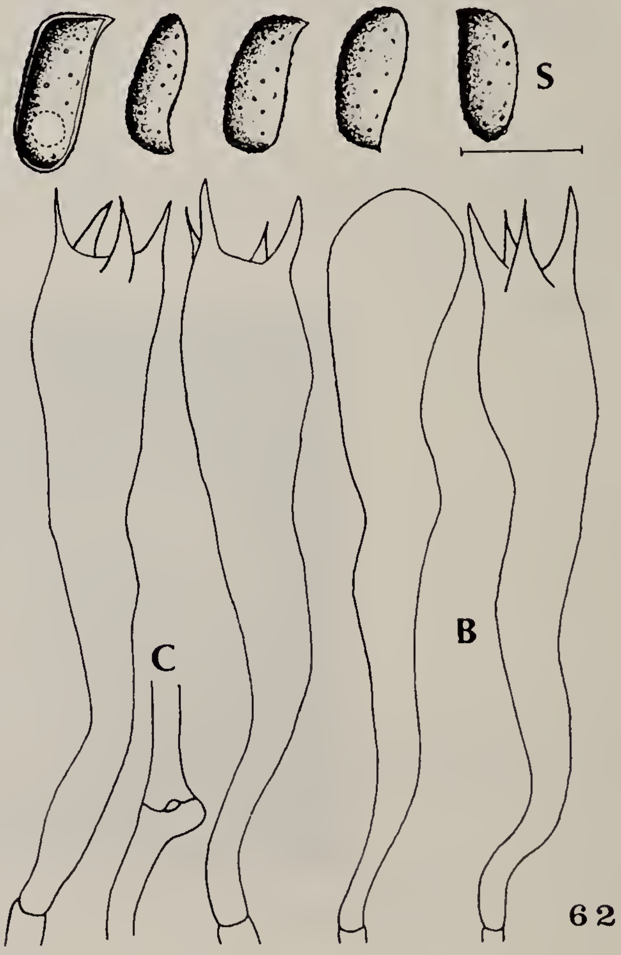
Figs 56, 57, 58. *Ramaria flavobrunnescens* var. *formosoides.*





Figs 59, 60. *Ramaria formosa.*





Figs 61, 62. *Ramaria formosa* var. *concolor.*

ground level, upper branches dense, axils rounded, apices blunt, simple or cuspid. Context pinkish white—8A2 (pale yellowish pink—31), bruising brown—6E8 (deep brown—56), fleshy but firm, drying hard and brittle. Stem white, 0.5-2.0 cm long, glabrous. Spore deposit cinnamon—6D6 (light brown—57). Odor absent. Taste mild in fresh material, dried flesh acidic. Terrestrial, in deciduous woods.

Macrochemical Tests: Positive color changes with all tests.

Microscopic Structures: Spores 9-14 x 4-5.5 μm, ochre, ellipsoid, finely verruculose. Basidia 50-60 x 6-8 μm with granular contents; 4 sterigmata, 3-5 μm long. Hymenium 55-65 μm thick, subhymenium 10-20 μm. Contextual hyphae 5-10 μm broad, subhymenial hyphae 1.5-4 μm. Clamp connections present.

Collections Examined: ACAD 12968, 25/8/77, Nicholsville, Kings Co.

Discussion: Ramaria formosa is easily recognized by its pinkish fruiting body with yellow-tipped branches. As Coker (1923) has pointed out, the chalky friable consistency of the dried flesh usually causes fragmentation in herbarium specimens and serves as an aid in the identification of dried material. *R. subbotrytis* also has a pinkish fruiting body with yellow-tipped branches but the pigmentation is more reddish, the spores are finely verruculose rather than ornamented with warts, and the consistency of the dried flesh is not friable.

Vinaceous-brown bruising reactions have been reported for the European specimens (Corner 1950) and Doty (1944) has confirmed this in material from the Pacific Northwest. Marr and Stuntz (1973) reported a brunnescent reaction in their material. A deep brown reaction was observed in var, *concolor,* while the bruising color in var. *formosa* was light orange.

Var. *concolor* also has the following dissimilarities with var. *formosa;* concolorous rather than yellow tips, a pinkish white context and an overall larger spore size (9-14 x 4-5.5 μm). ACAD 12968, the only specimen collected during the 1977 season, was found in deciduous woods, while collections of var. *formosa* were made in mixed woods, generally under hemlock.

R. formosa is reported to be poisonous, causing diarrhea (Huber, Heim, in Corner 1950).

Ramaria gracilis (Pers. ex Fr.) Quél.

Flore Mycol., 463, 1888.

Clavaria gracilis Pers., Comm. Fungi. Clavif., 50, 1797.
Clavaria gracilis Fr., Syst. Mycol. 1: 475, 1821.
Clavaria alutacea Lasch, *in* Rabenh. Klotzs. Herb. Viv. Mycol., cent. 16, No. 1519, 1851.
Clavariella gracilis (Fr.) Karst., Hattsv. Ryssl. 2: 188, 1882.
Clavaria fragrans E. & E., North Am. Fungi, 2nd ser., No. 2023, 1888.
Clavaria fragrantissima Atk., Ann. Mycol. 6: 57, 1908.
Clavaria flavuloides Burt, Ann. Mo. Bot. Gard. 9: 28, t. 5, f. 34, 1922.

gracilis (L)—slender

Figs 63, 64

Fructifications: 3-8 x 1-5 cm, greyish orange—5B4 (light yellowish brown), upper branches pastel yellow—2A4 (pale greenish yellow—104), drying concolorous. Branches dichotomous to polychotomous, numerous, widely spaced, divergent, axils acute, apices single or bifid, tapered, slender, acute or subscristate. Context white, unchanging, tough, drying brittle. Stem 0.5-1.5 cm long, single, slender, white or paler concolorous, mycelioid with white floccose mycelial strands at the base. Spore deposit greyish orange—6B5 (light brown—57). Taste bitter. Odor faintly of anise. Terrestrial, in coniferous or mixed woods.

Macrochemical Tests: Positive color reactions occurring with $FeSO_4$, pyrogallol, α-naphthol, guaiac tincture. No significant color changes with guaiacol, 2% phenol or aniline.

Microscopic Structures: Spores 5-8 x 3-4 μm, pale yellow, ellipsoid to ovoid, apiculate, minutely warted with warts in subspiral arrangement, 1-2-guttate. Basidia 30-45 μm, basally clamped, with 4 sterigmata 4-5 μm long. Hymenium 40-60 μm thick, subhymenium 20-25 μm. Contextual hyphae 3-9 μm broad, thin-walled; subhymenial hyphae 2-3 μm broad, thin-walled, tightly interwoven. Clamp connections abundant. Thick-walled skeletal hyphae, walls 0.5-2.0 μm.

Collections Examined: ACAD 12946, 22/8/77, Moores Falls, Kings Co.; ACAD 5052, 2/9/59, Nashwaak Bridge, N.B.

Discussion: Ramaria gracilis has a delicate appearance somewhat resembling *Ramariopsis kunzei* or *Clavulina cristata.* The small, ovoid, faintly warted spores, the pliable flesh, the presence of skeletal hyphae and the odor of anise are distinctive features of the species.

The color in the hymenium is caused by the pale yellowish sap and guttae of the basidia (Corner 1970).

Ramaria longissimispora sp. nov.

longissimispora (L)—very long-spored

Figs 65, 66, 69

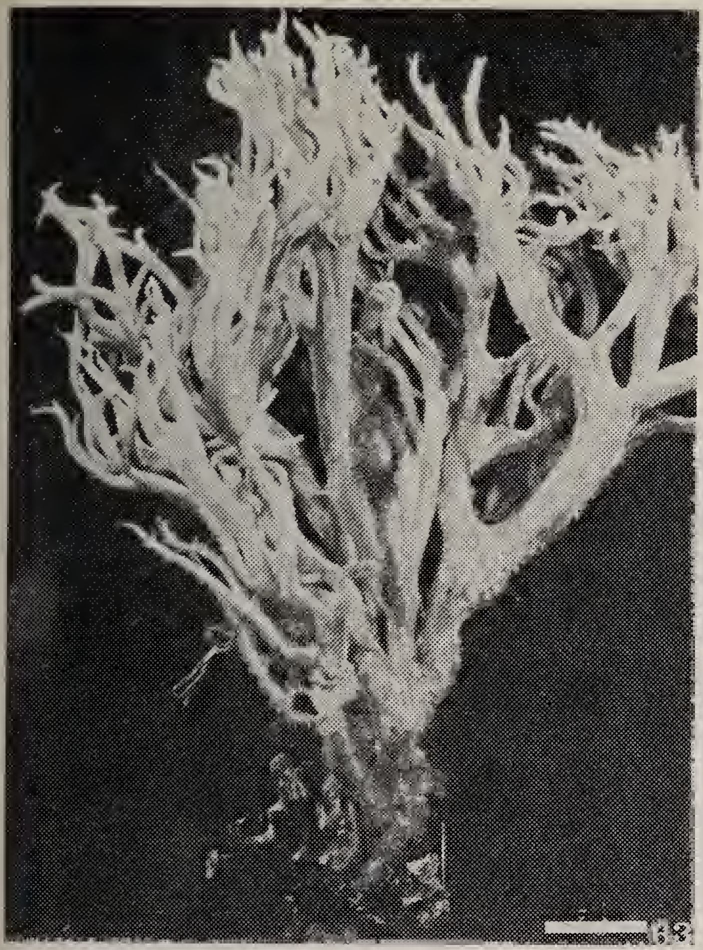
Basidiocarpia 8-10 cm alta, 4-7 cm lata, crassa, ramis parallelis apicibusque digitatis; basis 1-2 x 1-2 cm, crassa, ramis abortivis, alba; rami inferni armeniaci, superi incarnati; contextus albus, odore fungali, sapore miti. Sectiones ramorum speciminum vivorum solutionibus alpha-naphtholi, guaicoli, guaiaci, et anilini haud adfectae autem solutionibus ferri sulphati, phenoli et pyrogalloli adfectae. Sporae 11-24 x 2-4.5 μm, oblongae-ellipticae, subtiliter ornatae vel rasiles. Basidia 40-60 x 6-7 μm, basi fibulata. Hyphae contexti 4-8 μm, fibulata. Fructificationes terrestres in sylvis deciduis.

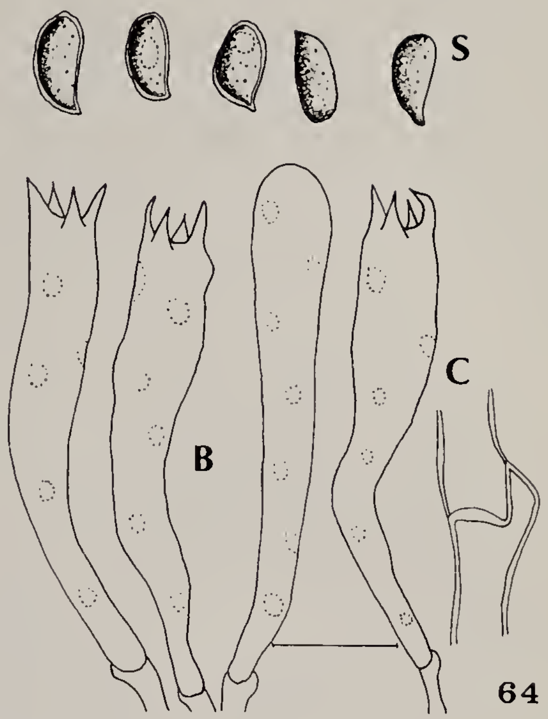
Holotypus ACAD 12947 in Nicholsville in comitato Kings lectus, in herbario E.C. Smithii, Universitatis Acadiae conservatus.

Fructifications: 8-10 x 4-7 cm, lower branches light orange—5A5 (moderate orange—53), upper branches pastel red—8A4 (moderate yellowish pink—29), drying apricot—5B6 (light brown—57), tips browning with age and withering. Branches polychotomous, stout, parallel, axils of lower branches rounded, upper branches subacute, apices pluridigitate, blunt or rounded. Context white, unchanging, fleshy-fibrous. Stem white, massive, stout, with abortive branches, 1-2 x 1-2 cm. Spore print greyish orange—6B5 (light brown—57). Taste mild. Odor fungal. Terrestrial, in deciduous woods.

Macrochemical Tests: No significant color reactions with α-naphthol, guaiac tincture, guaiacol, or aniline. Positive reactions with $FeSO_4$, pyrogallol, 2% phenol.

Microscopic Structures: Spores 11-24 x 3-4.5 μm ochre, oblong-elliptical to subfusiform, finely ornamented to smooth, multiguttate. Basidia 40-60 x 6-7 μm, basally clamped; 2-4 sterigmata, 4-7 μm. Hymenium thickening to 100 μm;





Figs 63, 64. *Ramaria gracilis.*

subhymenium 20-30 μ thick, interwoven, hyphae of short rounded cells 2-3 μm in diameter. Contextual hyphae 4-8 μm. Clamp connections abundant.

Collections Examined: ACAD 12947, 25/8/77, Nicholsville, Kings. Co.

Discussion: In the field, the red pigmentation and blunt apices of this species resemble *R. subbotrytis. R. longissimispora* differs, however, in the white flesh, the stout branching habit and the presence of clamps. The long, smooth, subfusiform spores are characteristic of the species.

Ramaria magnipes Marr & Stuntz

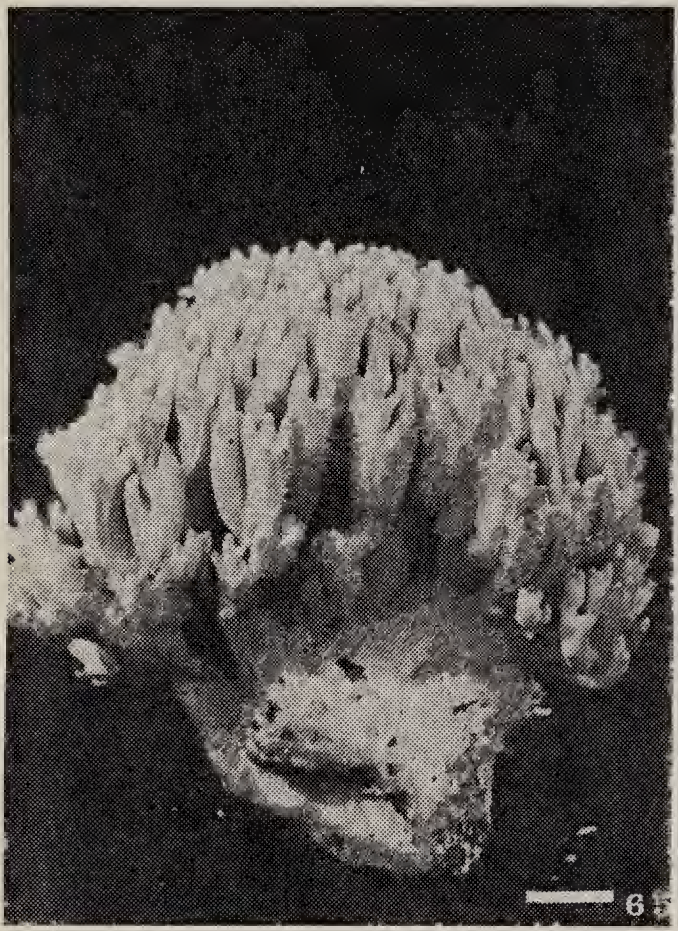
Bibl. Mycol. 38: 105, 1973.

magnipes — magnus (L) — large
pes (L) — foot

Figs 67, 68, 70

Fructifications: Gregarious, 6-11 x 7-12 cm, genet-3A7 (brilliant yellow — 83), drying light yellow — 4A4 (pale yellow — 89). Branches polychotomous, thick, stout, short, compact, divaricate, axils acute, apices polydigitate rounded, browning with age, resembling a loose-headed cauliflower. Context white, bruising chrome orange — 6A8 (strong orange — 50), fleshy but firm becoming spongy with age, drying hard. Stem white, smooth, 5-8 x 2.5-4.0 cm, abortive branches present. Spore deposit greyish orange — 6B5 (light brown — 57). Taste mild. Odor sweet. Terrestrial, in mixed woods, open fields and lawns.

Macrochemical Tests: No positive color changes in pyrogallol, guaiac tincture, 2% phenol, aniline or $FeSO_4$. Positive color reactions with α-naphthol, guaiacol and Melzer's reagent.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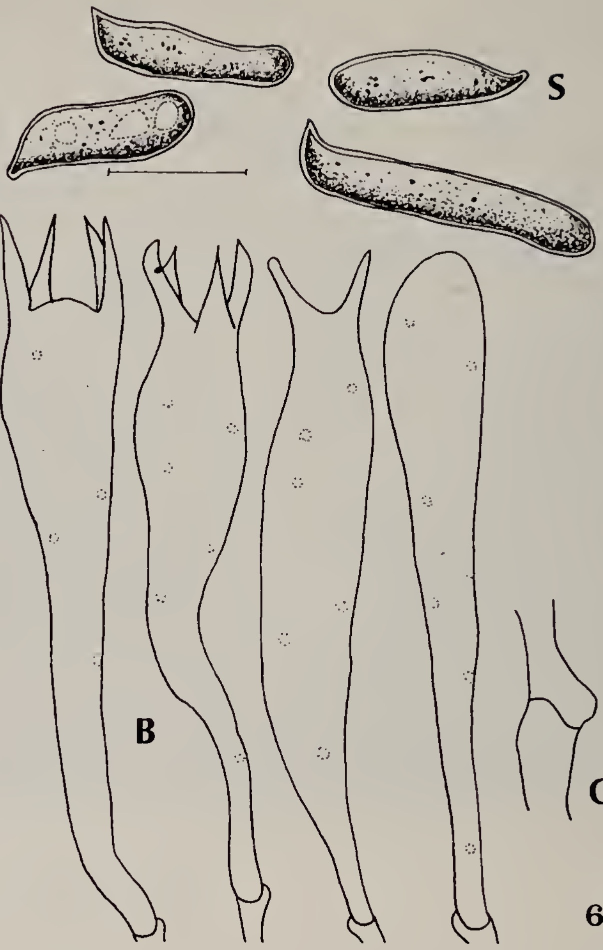
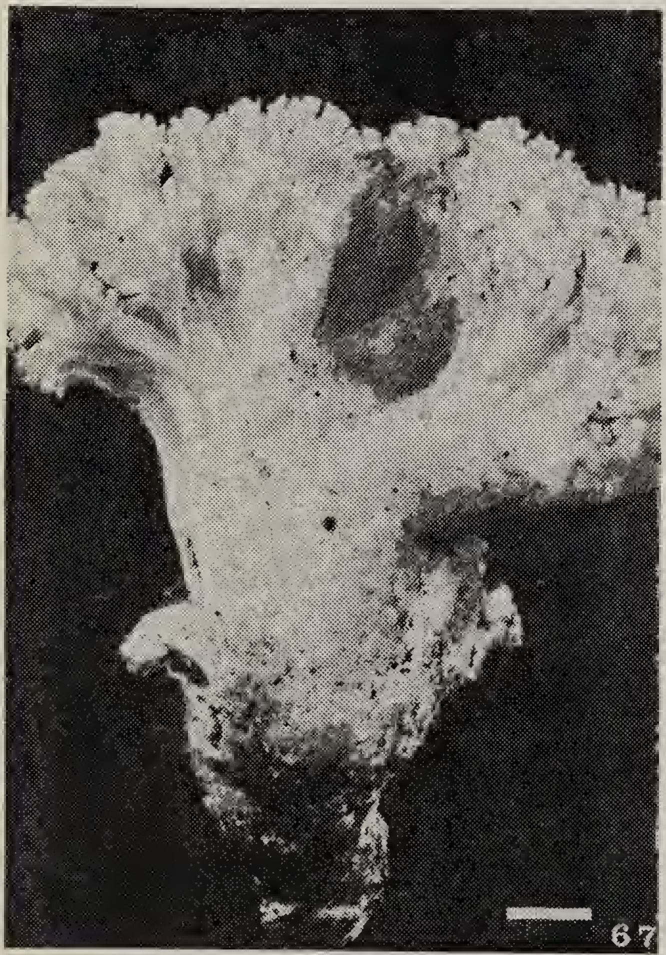


66

Figs 65, 66. *Ramaria longissimispora.*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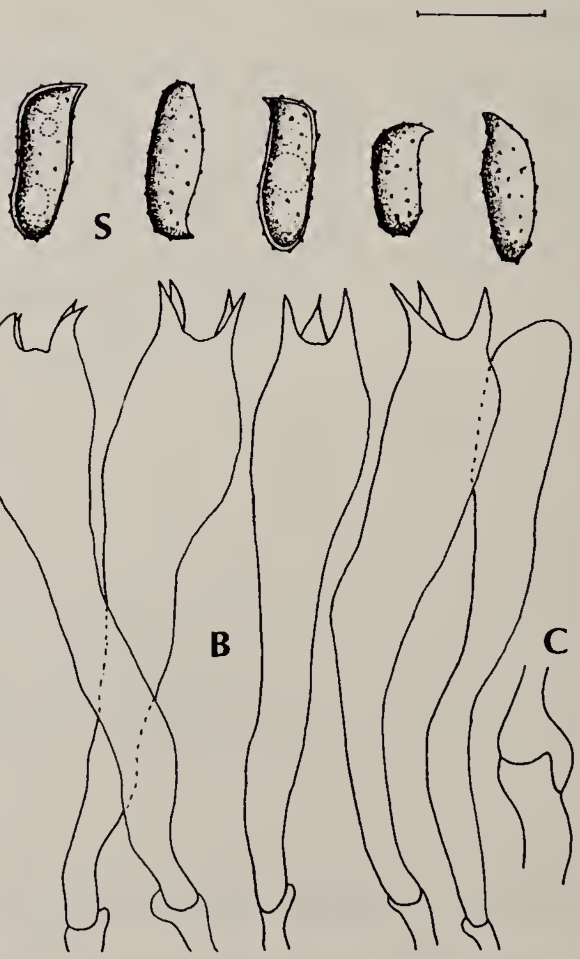


68

Figs 67, 68. *Ramaria magnipes.*

Microscopic Structures: Spores 7-15 x 3-4.5 µm, average 8-10 x 4 µm, ochre, oblong-ellipsoid, punctulate, faintly warted. Basidia 30-55 µm, basally clamped, with 4 sterigmata 4-6 µm. Hymenium 40-70 µm thick; subhymenium 20 µm. Contextual hyphae 4-6 µm broad; subhymenial hyphae 2-3 µm. Clamp connections present.

Collections Examined: ACAD 12948, 18/8/77, Lequille, Annapolis Co.; ACAD 12949, 31/8/77, Moses Mountain, Hants Co.; M-583, 1/7/67, 12 miles east of Stevens Pass, 3 miles west of Merritt, Wash.

Discussion: The deep-yellow upper branches and the smooth white stipe, generally with abortive branches at the base, may cause this species to be identified in the field as *R. flavobrunnescens* var. *flavobrunnescens.* The concentration of short, compact branches, cauliflower-like in appearance, towards the top of the fruiting body, are easily distinguished from the elongated, brush-like branches of *R. flavobrunnescens.*

Ramaria obtusissima (Pk.) Corner

Ann. Bot. Mem. 1: 609, 1950.

obtusissima (L)— markedly obtuse, blunt
Figs 71, 72

Fructifications: 10-20 x 8-15 cm, cream—4A3 (light orange yellow—70), drying greyish orange—5B5 (light brown—57), tips light yellow—4A4 (pale orange yellow—73), turning brown with age and withering. Branches polychotomous, breaking up into stout main branches at ground level which quickly divide into a dense mass of branchlets 1-5 mm wide, axils rounded, apices blunt, pluridigitate, branches finely channelled. Context white bruising brownish grey—6E2 (brownish grey—64) or violet brown—11F8 (very dark purplish red—260), fleshy fibrous drying hard and brittle. Stem 5-9 x 2-5 cm, massive, rooting, white, finely mycelioid. Spore deposit greyish orange—6B5 (light brown—57). Taste mild. Odor sweet. Terrestrial, in mixed woods.

Macrochemical Tests: No significant color change occurring in pyrogallol, α-naphthol, guaiac tincture, guaiacol, 2% phenol or aniline. Positive reaction with $FeSO_4$.

Microscopic Structures: Spores 10-15 x 3-5 µm, ochre, subcylindrical-ellipsoid, often bent or reflexed, smooth or faintly roughened. Basidia 40-60 x 7-9 µm, basally clamped; 4 sterigmata, 5-7 µm. Hymenium 45-70 µm thick; subhymenium 10-20 µm. Contextual hyphae 5-13 µm broad; subhymenial hyphae 2-4 µm. Clamp connections present.

Collections Examined: ACAD 12950, 2/9/77, Harrington slope, Kings Co.; ACAD 12951, 4/9/77, Vault Road, Melvern Square, Annapolis Co.; ACAD 12952, 22/8/77, Moores Falls, Kings Co.; ACAD 12914, 2/9/77, Harrington slope, Kings Co.; ACAD 12915, 7/9/77, Harrington slope, Kings Co.; ACAD 5082, 2/9/62, Lake Kejimkujik area, Queens Co.

Discussion: Ramaria obtusissima is a variable species. Although similar to *R. secunda* it is generally larger in size, has yellow rather than pink tips and longer, narrower spores which are typically swayed back. Corner (1970) recognizes the following forms: 1) rough-spored form, 2) pink form, 3) vinescent form, 4) rich yellow form. The bruising reactions observed would place the examined collections in the vinescent form. Wehmeyer (1935) described a similar reaction for collections that he examined from Nova Scotia.

Ramaria rubripermanens Marr & Stuntz.

Bibl. Mycol. 38: 43, 1973.

rubripermanens— ruber (L)—red
permanens (L)—persistent, lasting

Figs 73, 74, 75

Fructifications: Gregarious, 7-25 x 4-20 cm, cream—4A3 (light orange yellow—70), drying apricot yellow—5B6 (light yellowish brown—76), tips dull red—9B3 (greyish yellowish pink—32), giving an overall vinaceous tinge. Branches polychotomous, crowded, axils rounded to subacute, slightly divaricate, apices pluridigitate, subacute to rounded. Context white, unchanging, firm when fresh, drying hard. Stem simple, white, cylindrical or conic, thick, 3-5 x 2-5 cm with primordial branches at the base. Spore deposit gold yellow—5B7 (strong orange—50). Taste mild. Odor not distinctive. Terrestrial, in mixed woods, sometimes under *Quercus.*

Macrochemical Tests: Positive color reactions with $FeSO_4$, pyrogallol. No significant color change in α-naphthol, guaiac tincture, guaiacol, 2% phenol or aniline.

Microscopic Structures: Spores 9-14 x 3-5 μm, average 10 x 4 μm, ochre, longitudinally striate, subellipsoid to mummy-shaped. Basidia 45-70 x 6-8 μm, basally clamped; 4 sterigmata, 4-7 μm. Hymenium 45-70 μm thick, subhymenium 15-20 μm. Contextual hyphae parallel, 4-12 μm broad; subhymenial hyphae 2-4 μm. Clamp connections frequent.

Collections Examined: ACAD 12953, 14/8/77, Agriculture Canada Experimental Station, Kentville, Kings Co.; ACAD 12954, 20/9/77, Aylesford Lake, Kings Co.; ACAD 12955, 7/9/77, Harrington slope, Kings Co.; ACAD 12956, 12/9/77, Harrington woods, Kings. Co.

Discussion: In the field, *R. rubripermanens* is not easily distinguished from *R. botrytis.* The smaller spores and the negative bruising reaction of *R. rubripermanens* serve to separate the 2. This species often occurs in a "fairy ring".

Ramaria sandaracina Marr & Stuntz var. sandaracina

Bibl. Mycol. 38: 81, 1973.

sandaracina (L)—sandaraca—red coloring matter

Figs 76, 77

Fructifications: Gregarious, 5-10 x 3-9 cm, branches and apices melon—5A6, (moderate orange yellow—71), yellow—2A6, (brillant yellow—83) in the region just above the stipe, fading from pale yellow—2A3 (pale yellow—89) to white at the base of the stipe; drying apricot—5B6 (dark orange yellow—72), apices drying garnet brown—7D8 (brownish orange—54). Branches polychotomous, subparallel, elongated, some branches marked with a central furrow or several fine furrows; apices acute to subacute, forked. Stem 2 x 1 cm, subfasiculate, mycelioid. Context subconcolorous with the surface, fleshy-fibrous, drying brittle. Spore deposit wheat—4A5 (pale yellow—89). Taste and odor indistinct. Terrestrial in coniferous woods.

Macrochemical Tests: Positive reaction with $FeSO_4$. No color changes occurring in pyrogallol, α-napthol, guaiac tincture, guaiacol, 2% phenol or aniline.

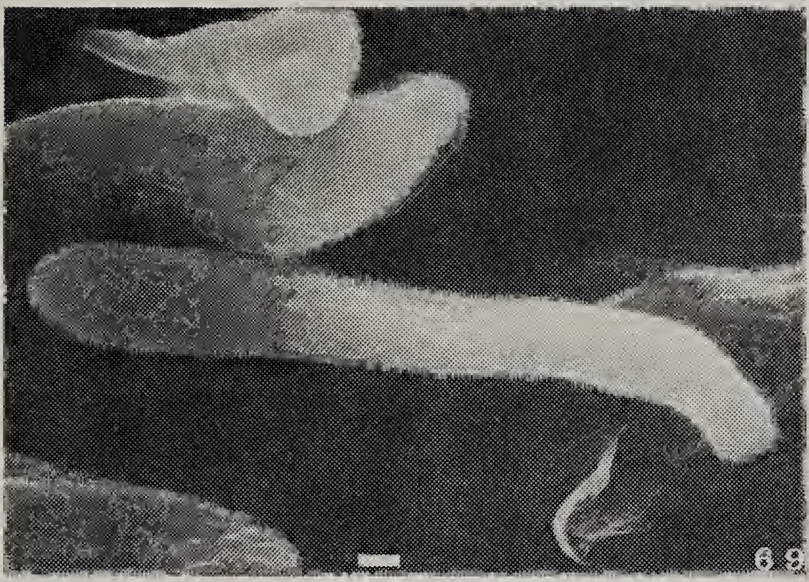


Fig 69. *Ramaria longissimispora.*

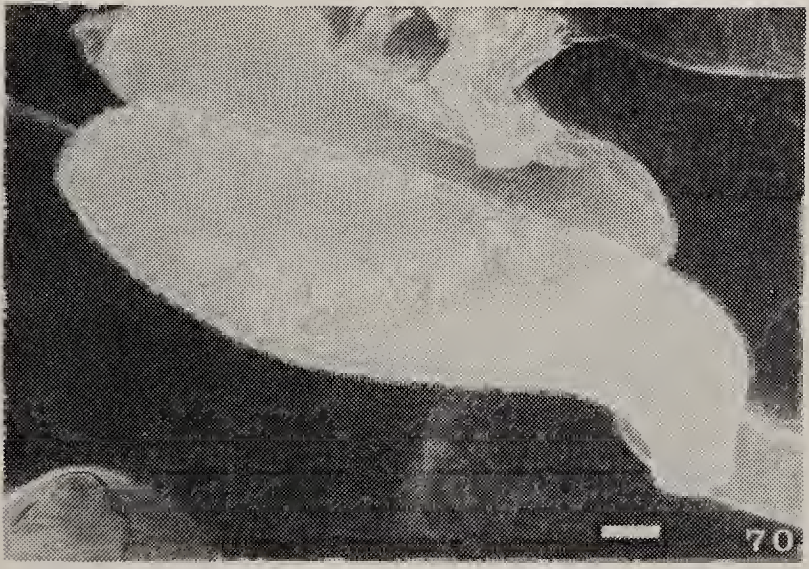
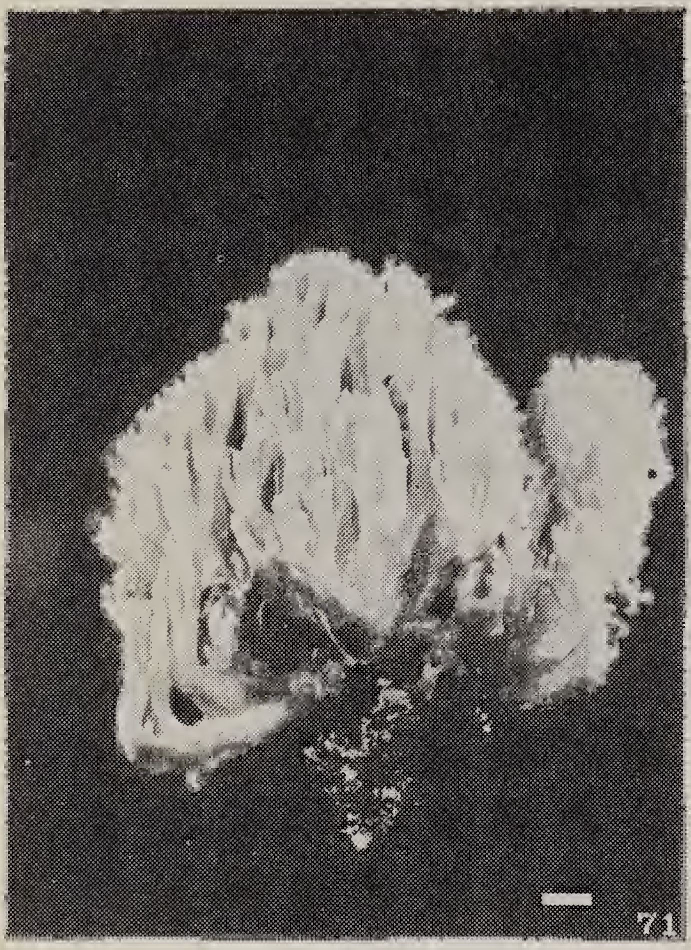


Fig 70. *Ramaria magnipes.*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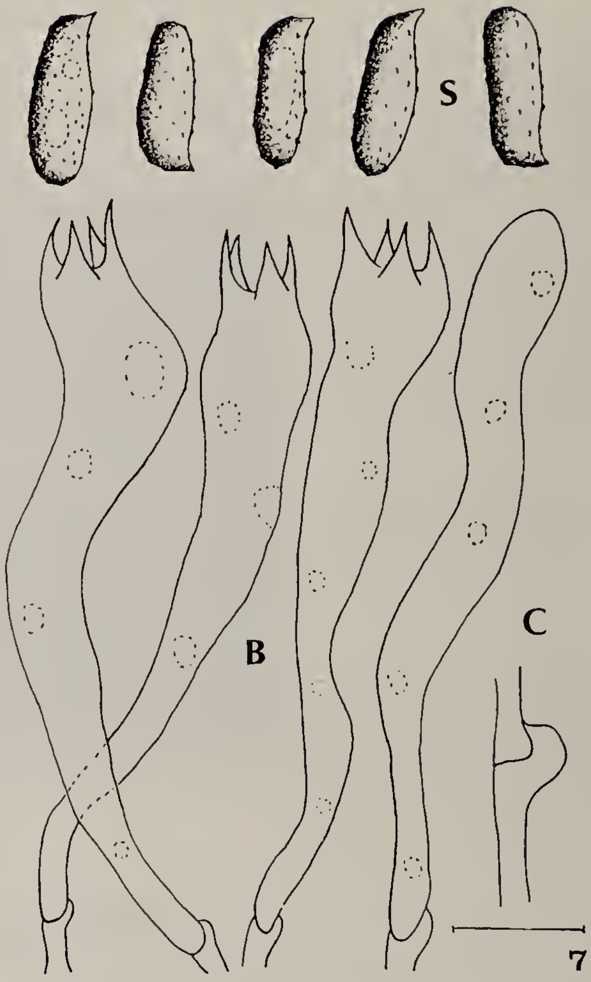


72

Figs 71, 72. *Ramaria obtusissima.*

Microscopic Structures: Spores 6.5-9.0 x 3.0-4.5 µm, ochre, ellipsoid, asperulate. Basidia 30-47 µm x 5-9 µm, basally clamped; 4 sterigmata, 3-5 µm long. Hymenium 40-55 µm thick, subhymenium 15-20 µm, hyphae thin-walled, 6-10 µm broad, clamped. Gloeoplerous hyphae 4-6 µm broad.

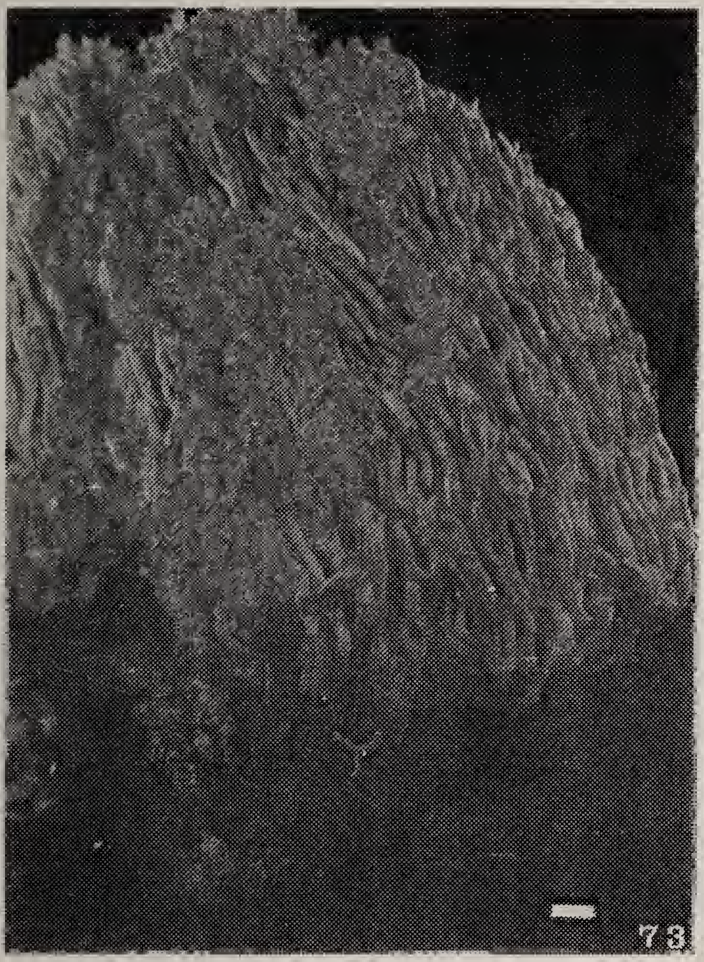
Collections Examined: ACAD 12924, 15/8/77, Scots Bay, Kings Co.

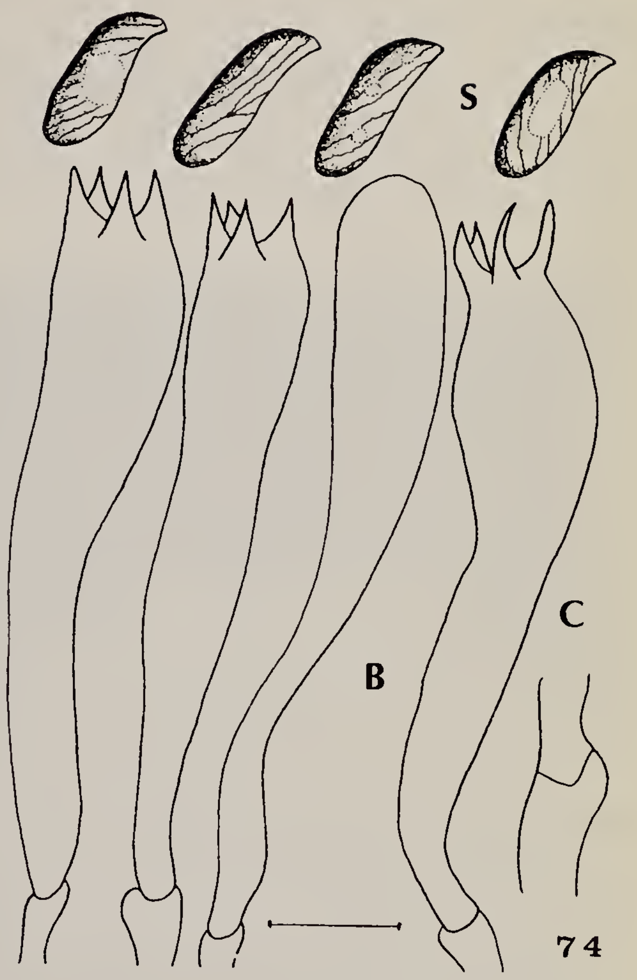
Discussion: The distinctive features of *R. sandaracina* are the deep orange pigmentation of the upper branches, with bright yellow pigmentation in the upper region of the stipe, the small asperulate spores, and the presence of clamped hyphae.

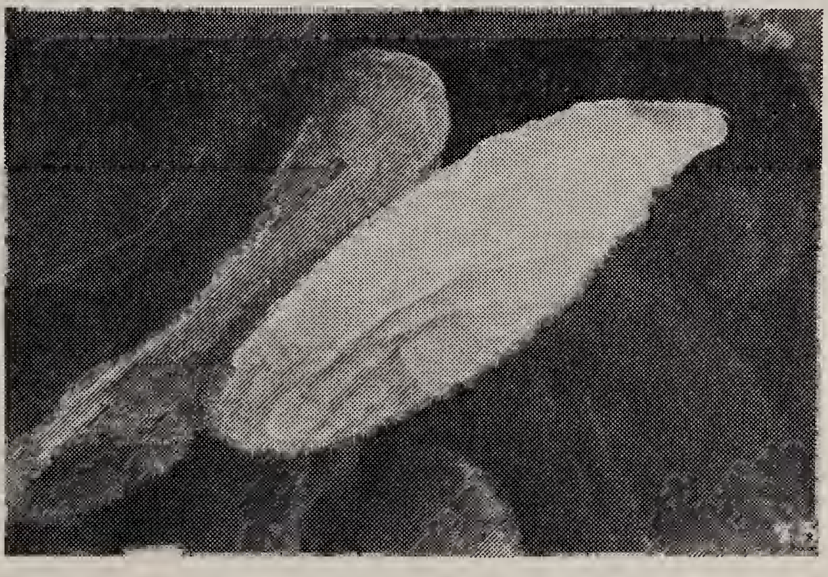
It is similar to *R. conjunctipes* in overall appearance, but *R. sandaracina* has a deeper pigmentation with concolorous tips and clamped hyphae.

The greyish violet bruising reaction reported by Marr and Stuntz (1973) was not observed in collection 12924.

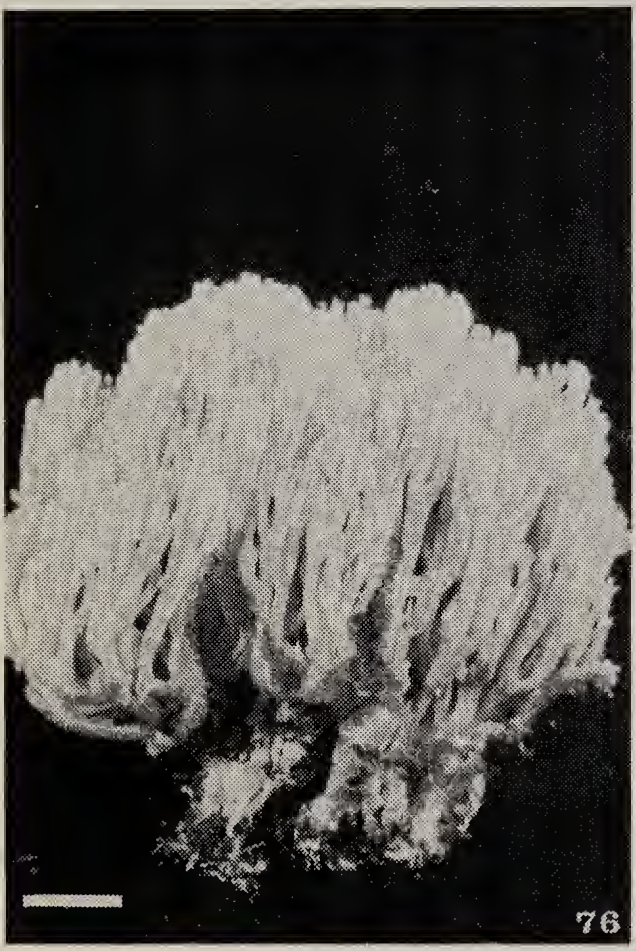
Marr and Stuntz (1973) have published 2 additional varieties: var. *chondrobasis* having larger fruiting bodies of subgelatinous consistency without distinct single or subfasiculate smooth base, and var. *euosma* with broader, more profusely branched fruiting bodies, light yellow apices and a sweet odor.

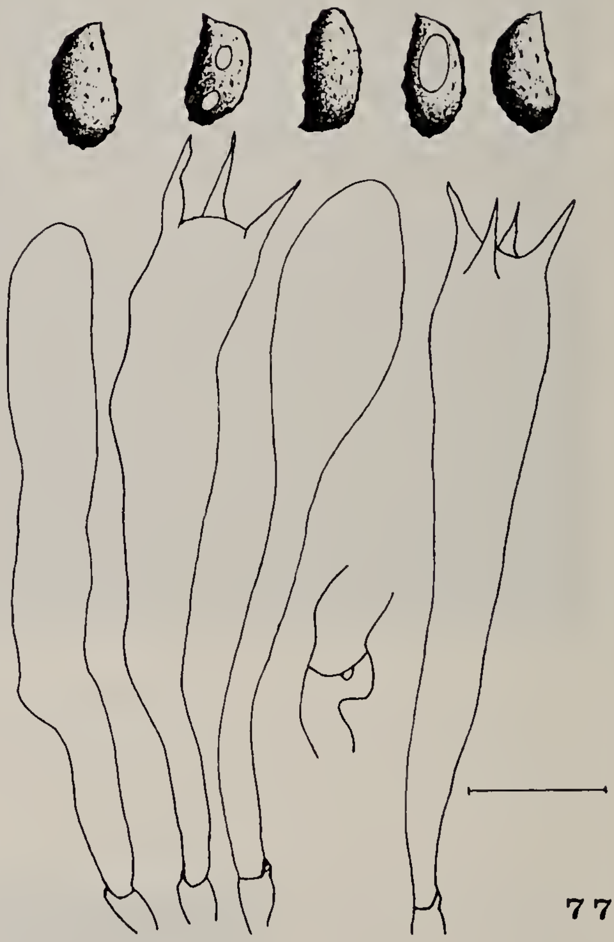






Figs 73, 74, 75. *Ramaria rubripermanens.*





Figs 76, 77. *Ramaria sandaracina* var. *sandaracina*.

Ramaria secunda (Berk.) Corner

Ann. Bot. Mem. 1: 620, 1950.

Clavaria secunda Berk., Grevillea 2: 7, 1873.
Clavaria crassipes Pk., Bull. N.Y. State Mus. 67: 27, 1903.

secunda (L)— having branches turned towards the same side.

Figs 78, 79, 80

Fructifications: 4-12 x 1.5-6.5 cm, salmon—6A4 (light orange—52) to orange grey—5B5 (light brown—57), drying apricot—5B6 (moderate orange—53), tip concolorous, often turning reddish brown—8E8 (moderate reddish brown—43) on bruising or with age. Branches dichotomous, numerous, slightly divergent, rather lax, smooth, becoming hollow, axils rounded, apices blunt or subacute, bifid. Context white or pale concolorous, fibrous, spongy. Stem 1-5 cm high, stout, but distinct, white, soft, glabrous, often with abortive branches. Taste mild. Odor brassicaceous. Spore deposit greyish orange—6B5 (light brown—57). Terrestrial, in mixed woods.

Macrochemical Tests: Positive color reactions occurring with $FeSO_4$, pyrogallol, α-naphthol, guaiac tincture, guaiacol, 2% phenol, aniline.

Microscopic Structures: Spores 8-12 x 3.5-5.0 μm, ochre, ellipsoid, slightly apiculate, faintly roughened, 1-2-guttate. Basidia 35-60 x 7-9 μm; 4 sterigmata, 3-5 μm. Hymenium 50-70 μm thick, subhymenium 20-25 μm. Contextual hyphae 3-8 μm broad, slightly thick-walled, walls up to 0.5 μm thick; subhymenial hyphae 3-4 μm broad. Clamp connections present.

Collections Examined: ACAD 12957, 15/8/77, Scots Bay, Kings Co.; ACAD 12958, 24/8/77, West Gaspereau, Kings Co.; ACAD 5822, 14/9/63, Lake Kejimkujik area, Queens Co.; ACAD 5451, 14/9/63, Lake Kejimkujik area, Queens Co.; ACAD 5442, 1/9/63, Moosehorn, Maine.

Discussion: Ramaria secunda is nearest to *R. obtusissima* in form and habit but differs in its shorter, broader spores which are not reflexed and in its pinkish rather than yellowish pigmentation. The stout, soft, glabrous stem, with abortive branches arising from the base, is a distinctive feature of *R. secunda.*

Corner (1970) after having examined the type specimens of *R. secunda* (Herb. Berk. 534, leg. M.A. Curtis, Car. sup.; Herb. Berk. 991, Santee River, leg. Ravenel; both at Kew) reduced the species to a variety (*holorubella*) of *R. botrytis.* The herbarium specimens of Berkeley were found to be side branches of a larger tuft, giving the impression that the species is characterized by secund branching. Marr and Stuntz (1973) made *C. holorubella* (Atk.) synonymous with *R. botrytis. Ramaria secunda* and *R. holorubella* were both cited as synonyms of *R. botrytis* var. *holorbella,* (Atk.) Corner.

The specimens examined in this survey differed from Corner's description of *R. holorubella* (Atk.) Corner, in the presence of abortive branches at the base of the stem, the pinkish tinge to the fruiting bodies, the more lax branching and the absence of a dull vinaceous staining reaction of the stem. Collections ACAD 12957, 12958, 5822, 5451, and 5442 form a group that appears to be beyond the circumscription of *R. botrytis,* and thus the same name *R. secunda* has been assigned.

Scanning electronmicrographs illustrate the differences in spore morphology. The specimens assigned to *R. botrytis* have distinctly striate spores while the spores of those specimens considered as *R. secunda* are verruculose although the verruculae are not always distinct and in some cases appear as striations (Fig 80).

Ramaria stricta (Pers. ex. Fr.) Quél.

Flore Mycol. 464, 1888.

Clavaria stricta Pers., Comm. Fung. Clavif., 45, 1795.
Clavaria stricta (Pers. ex. Fr.), Syst, Mycol. 1: 468, 1821.
Merisma stricta (Pers. ex. Fr.) Sprengel, Syst. Veg. 4: 495, 1827.
Clavariella stricta (Pers. ex. Fr.) Karst., Bidr. Känn. Finl. nat. o Folk. 37: 184, 1882.
Corallium strictum (Pers. ex. Fr.) Hahn., Pilzsammler, 73, 1883.
Clavaria syringarum Pers., Mycol. Eur. 1: 164, 1822.
Lachnocladium odoratum Atk., Ann. Mycol. 6: 58, 1908.

stricta (L)—close

Figs 81, 82

Fructifications: Solitary or gregarious, 5-10 x 3-5 cm, coffee color—6D3 (light greyish brown—60), upper branches pale orange—5A3 (light orange—52), drying greyish orange—6B5 (moderate orange—53), dried plants blackish and metallic-looking at tips. Branches somewhat flattened, dichotomous, parallel, numerous, elongate, slender, rather lax, axils rounded, apices bifid and acute, straight or divaricating. Context concolorous, tough, unchanging, drying dark. Stem 0.5-.10 x 0.5-1.0 cm, white, mycelioid, branched from or near the base, arising from a white thick, woolly basal tomentum with white thread-like rhizomorphs extending into the substratum. Spore deposit greyish orange—6B5 (light brown—57). Taste and odor indistinct. Lignicolous, on dead wood, bark or humus of coniferous trees.

Macrochemical Tests: Positive color reactions occurring in $FeSO_4$, pyrogallol, guaiac tincture, guaiacol, 2% phenol, aniline. No reaction was observed with α-naphthol.

Microscopic Structures: Spores 7-9 x 3.5-5.0 μm, pale yellow, ellipsoid, finely ornamented or minutely verruculose. Basidia 35-45 x 6-7 μm, basally clamped; 4 sterigmata, 5-7 μm long. Hymenium 40-50 μm thick; sybhymenium 20 μm. Contextual hyphae 3-7 μm broad, walls thickened, 1-2 μm; subhymenial hyphae 2.5-3.5 μm. Rhizomorphs dimitic. Clamp connections abundant.

Collections Examined: ACAD 10913, 27/8/77, West Gaspereau, Kings Co.; ACAD 5782, 17/9/67, Priest River Experimental Forest, Idaho.

Discussion: Ramaria stricta is similar to *R. concolor* but it differs in its generally smaller size, laxer branching, pale yellowish or greenish-yellow branch tips, and its tougher denser flesh. *R. stricta* is characteristic of a coniferous habitat (although it is occasionally found on deciduous wood), whereas *R. concolor* is characteristically in deciduous woods. In comparison with *R. concolor, R. stricta* is considered to be rare. It was collected only once during the 1977 season.

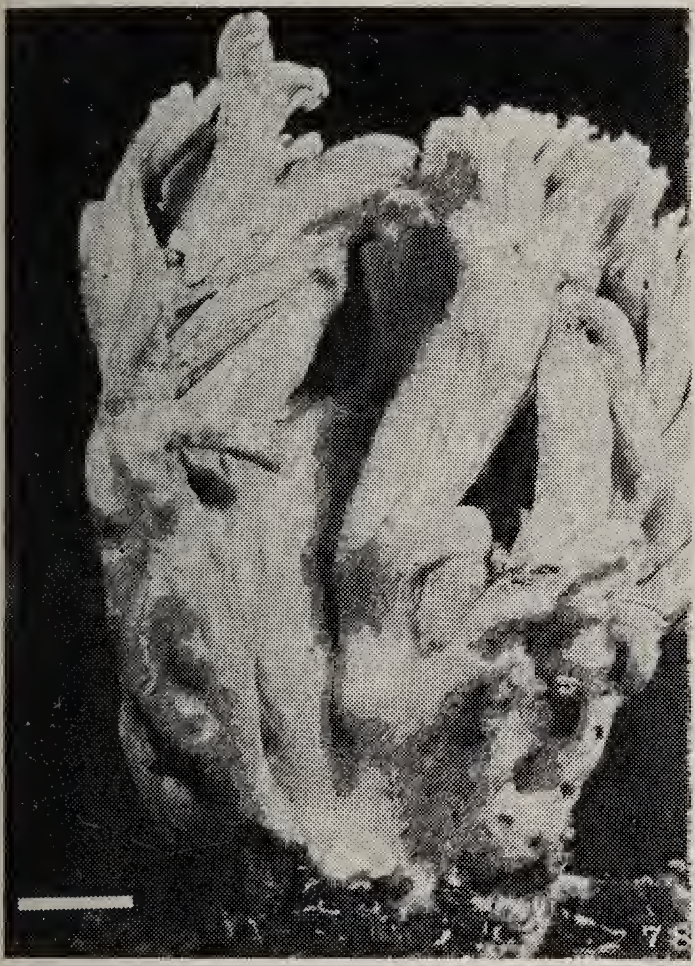
Ramaria subbotrytis (Coker) Corner

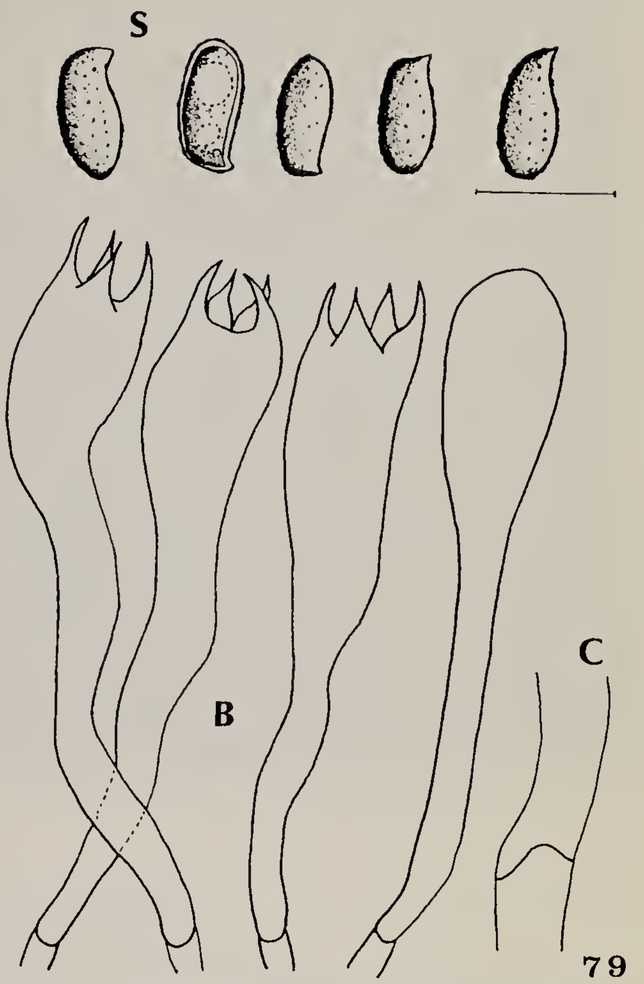
Ann. Bot. Mem. 1: 625, 1950.

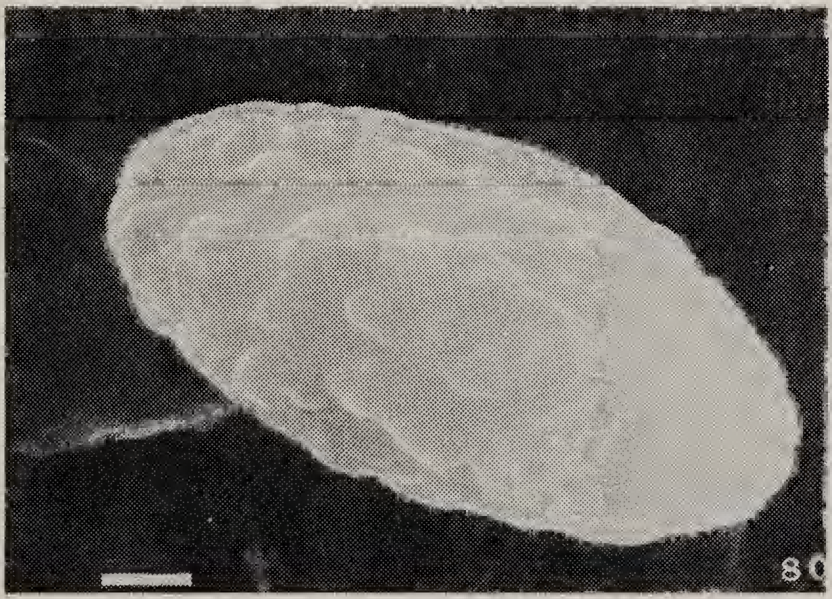
Clavaria subbotrytis Coker, Clav. U.S. Can, 116, 1923.

Figs 83, 84

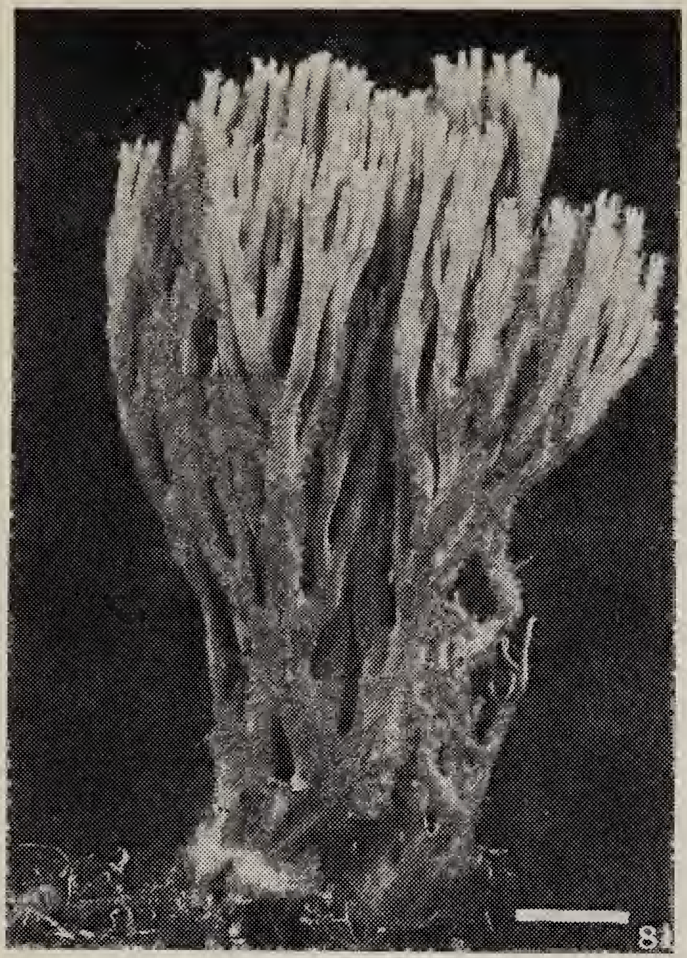
Fructifications: 3-10 x 2-7 cm, madder red—9A7 (deep yellowish pink—27), drying greyish orange—5B5 (moderate orange—53), tips light yellow—4A4 (light orange yellow—70), when young, becoming concolorous at maturity. Branches







Figs 78, 79, 80. *Ramaria secunda.*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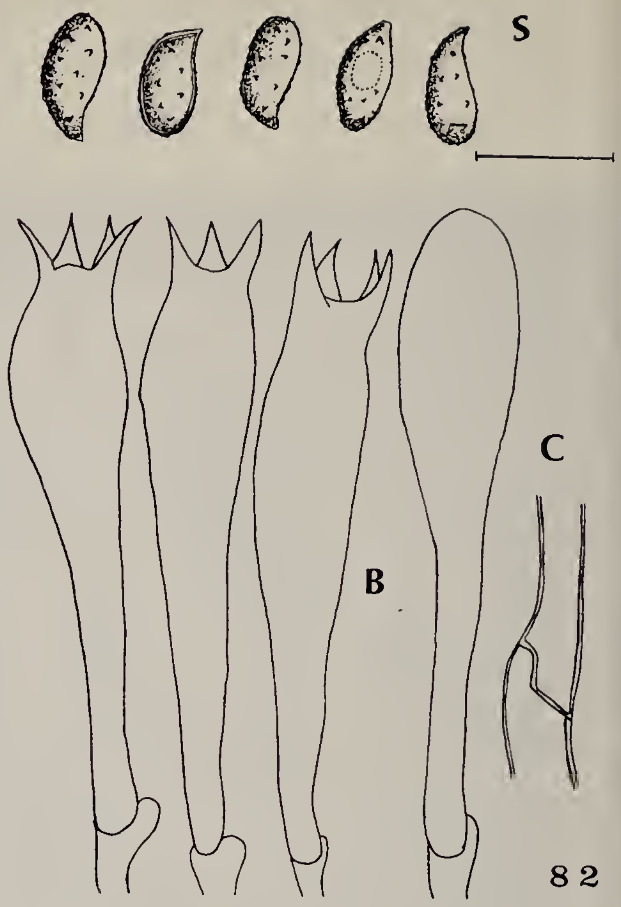

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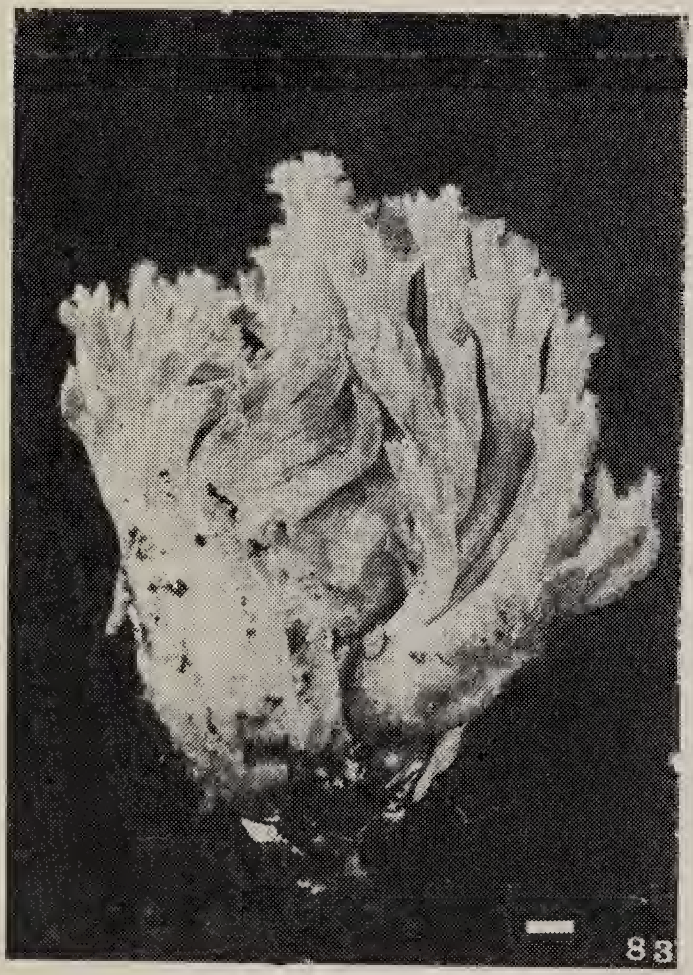
Figs 81, 82. *Ramaria stricta.*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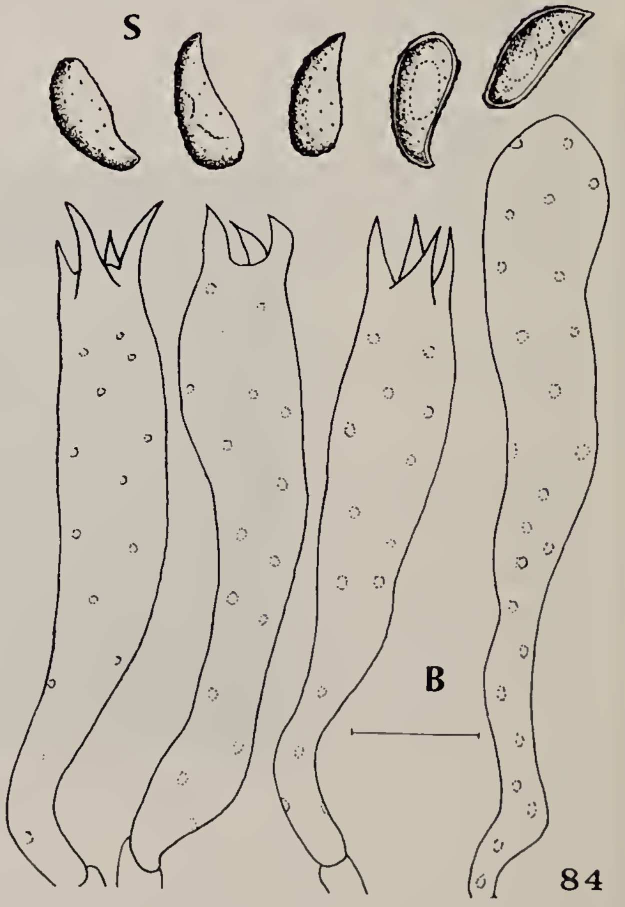


84

Figs 83, 84. *Ramaria subbotrytis.*

polychotomous, acutely divaricate, apices pluridigitate and blunt, axils acute. Context vivid red—9A8 (deep yellowish pink—27), remaining red longer than the surface, unchanged by bruising, tender but not brittle, not chalky when dry. Stem smooth, white, multiple, 0.5-2.5 cm, tapering downwards. Spore deposit cinnamon—6D6 (light brown—57). Taste mild. Odor absent. Terrestrial, in humus in mixed woods, under *Fagus grandifolia*.

Macrochemical Tests: Positive color changes with $FeSO_4$, pyrogallol, α-naphthol, guaiac tincture, guaiacol, 2% phenol, aniline.

Microscopic Structures: Spores 7-11 x 3-4 μm, ochre, ellipsoid, finely verrucose. Basidia 50-60 x 6-8 μm, with granular contents; 4 sterigmata 3-5 μm long. Hymenium 55-65 μm thick, subhymenium 10-20 μm. Contextual hyphae 5-10 μm broad, interwoven; subhymenial hyphae 1.5-4 μm. Clamp connections absent.

Collections Examined: ACAD 12967, 16/9/77, Gospel Wood Road, Kings Co.

Discussion: Corner (1950) regarded *R. subbotrytis* as a rather rare species and only 1 specimen was collected in Nova Scotia throughout the 1977 season. In the field, it may be confused with *R. conjunctipes*, but *R. subbotrytis* has an overall deeper red pigmentation, vivid red context, an absence of clamps and positive reactions to all the applied chemical tests. The yellow tips suggest an affinity with *R. formosa*, but *R. subbotrytis* is distinguished by its deeper red pigmentation, narrower and smoother spores, and in the texture of the dried flesh which is not chalky-friable.

Ramaria suecica (Fr.) Donk

Rev. Niederl. Homobas., Aphyll. 2: 105, 1933.

Clavaria suecica Fr., Syst. Mycol. 1: 469, 1821.
Clavariella suecica (Fr.) Karst., Hattsv. Ryssl. 2: 184, 1882.
Clavaria circinans Pk., Rep. N.Y. State Mus. 39: 43, 1886.

Suecica (L)— Sweden

Figs 85, 86

Fructifications: Gregarious, 2-6 x 1-4 cm, apricot yellow—5B6 (moderate orange—53) to light orange—5A4 (light orange—52), drying concolorous, tips concolorous or whitish to greyish orange—6B5 (light brown—57). Branches polychotomous, smooth, erect, branched one to three times at approximately the same levels with a brush-like mat of pointed tips, somewhat divergent or erect on one side of the stem and outcurved on the other, axils rounded, apices forked, subacute. Context white or paler concolorous, sometimes bruising rufescent, tough, drying brittle. Stem 4-20 mm, smooth, white, arising from a white tomentose base. Spore deposit greyish orange—6B5 (light brown—57). Taste not distinctive. Odor musty or rancid. Terrestrial, in coniferous or deciduous woods.

Macrochemical Tests: No positive color reactions occurring in α-naphthol, guaiac tincture, guaiacol, 2% phenol or aniline. Positive reaction with $FeSO_4$, and a weakly positive reaction with pyrogallol.

Microscopic Structures: Spores 6-10 x 3.5-5.0 μm, hyaline to pale yellow, oblong-ellipsoid, asperulate to minutely verrucose. Basidia 35-50 μm; 4 sterigmata, 5-7 μm long. Hymenium 40-70 μm thick, subhymenium 10-20 μm. Contextual hyphae 2-9 μm broad, thin-walled, inflating to 18 μm; subhymenial hyphae 2-4 μm. Clamp connections absent.

Collections Examined: ACAD 12969, 31/8/77, Moses Mountain, Hants Co.; ACAD 12970, 7/9/77, Harrington slope, Kings Co.; M-615, 3/10/67, North Olympics, near Park, Wash.

Discussion: Ramaria suecica is a northerly, subarctic or mountain species. (Corner 1950). The distinctive features are its small warted spores, small size, and tough but soft flesh. It differs from *R. stricta* in its sparser branching, without long close branches, and in the lighter color and softer, more chalky texture of the dried flesh. The latter is similar to the chalky-friable flesh of *R. formosa.*

Corner (1950) reports clamp connections but none was observed in either collection examined.

Ramaria xanthosperma (Pk.) Corner

Ann. Bot. Mem. 1: 632, 1950.

Clavaria xanthosperma Pk., Bull. N.Y. State Mus. 94: 21, 1905.

xanthosperma— xantho (Gk)—yellow
sperma (L)—seed

Figs 87, 88

Fructifications: 5-9 x 4-7 cm, yellowish white—3A2 (yellowish white—92), drying concolorous, tips pastel yellow—3A4 (light yellow—86), browning with age and withering. Branches polychotomous, lower branches stout, upper branches numerous, compact, erect with a broad curving angle, tapering, lower axils rounded, upper axils acute, apices acute, forked or pluridigitate. Context concolorous, bruising dull vinaceous, fleshy-fibrous, slightly gelatinous. Stem 1.0-1.5 x 1.0-1.5 cm, stout, with abortive branches at the base, intense vinaceous stain when bruised. Spore deposit greyish orange—6B5 (light brown—57). Taste mild. Odor sweet. Terrestrial, in mixed woods.

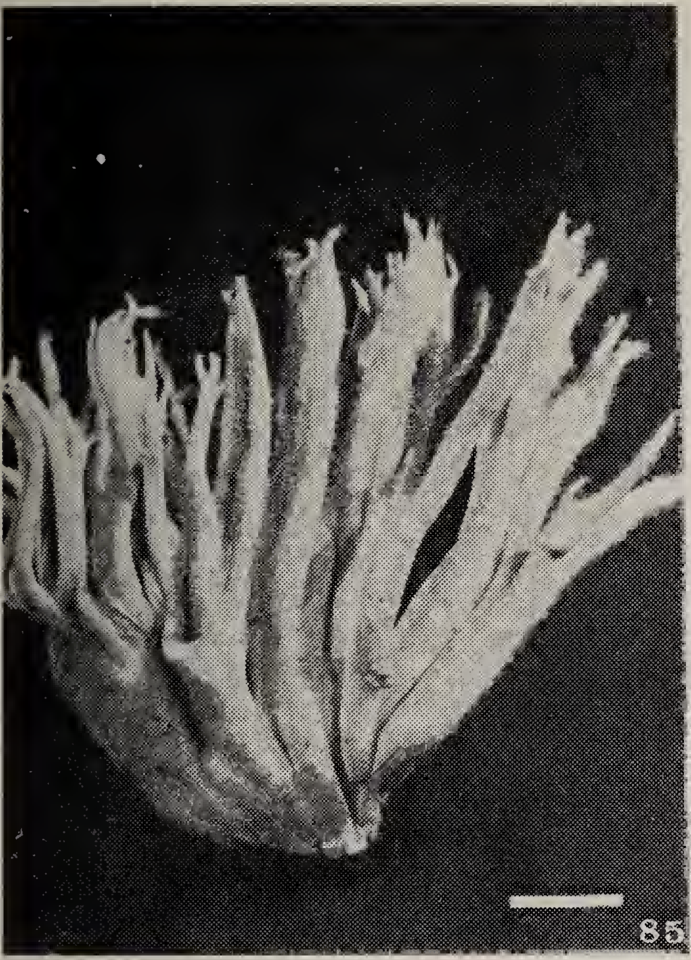
Macrochemical Tests: No positive color reactions occurring in pyrogallol α-naphthol, guaiac tincture, guaiacol, 2% phenol, aniline. Positive reactions occurring with $FeSO_4$.

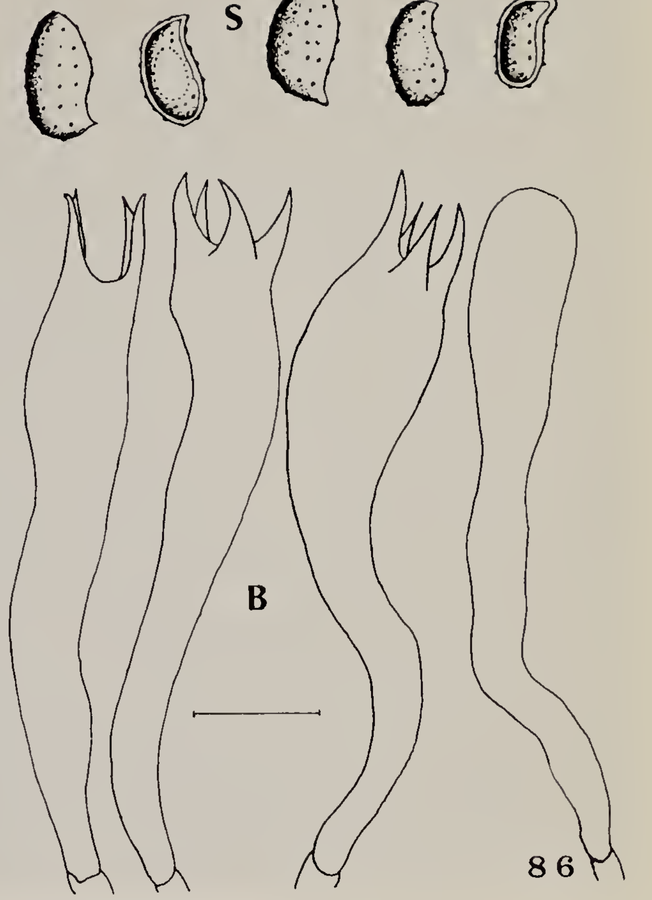
Microscopic Structures: Spores 9-15 x 3.5-5.0 μm, buff, oblong-ellipsoid, sinuous, nearly smooth or very slightly verruculose, with faint spiral lines or grooves. Basidia 45-65 μm; 4 sterigmata, 3-5 μm. Hymenium 60-70 μm thick; subhymenium 15-20 μm. Contextual hyphae 5-10 μm broad, thin-walled. Clamp connections absent.

Collections Examined: ACAD 12972, 24/8/77, West Gaspereau, Kings Co.; ACAD 644, 1/9/32, Agriculture Canada Experimental Station, Kentville, Kings Co.

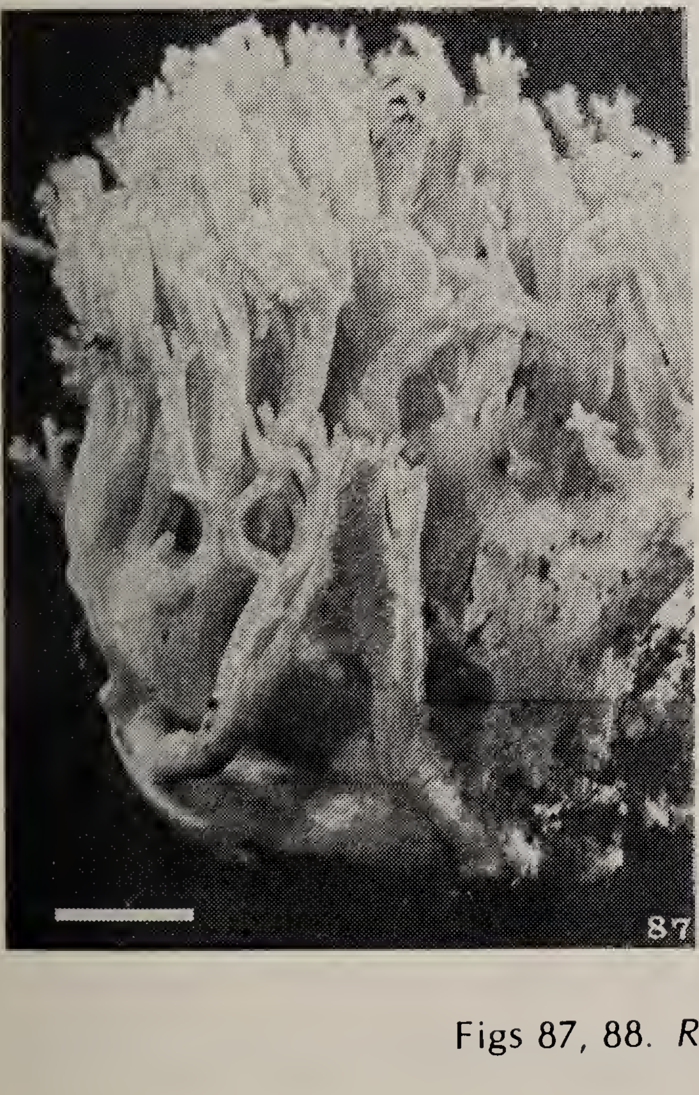
Discussion: R. xanthosperma is a rare species (Corner 1950). The pale ivory color with pale yellow tips, the vinaceous discoloration and the long smooth spores are characteristic of the species. There is a close similarity with *R. obtusissima* but *R. xanthosperma* has a smaller fruiting body, lacks clamp connections and has spores ornamented with faint spiral lines or grooves.

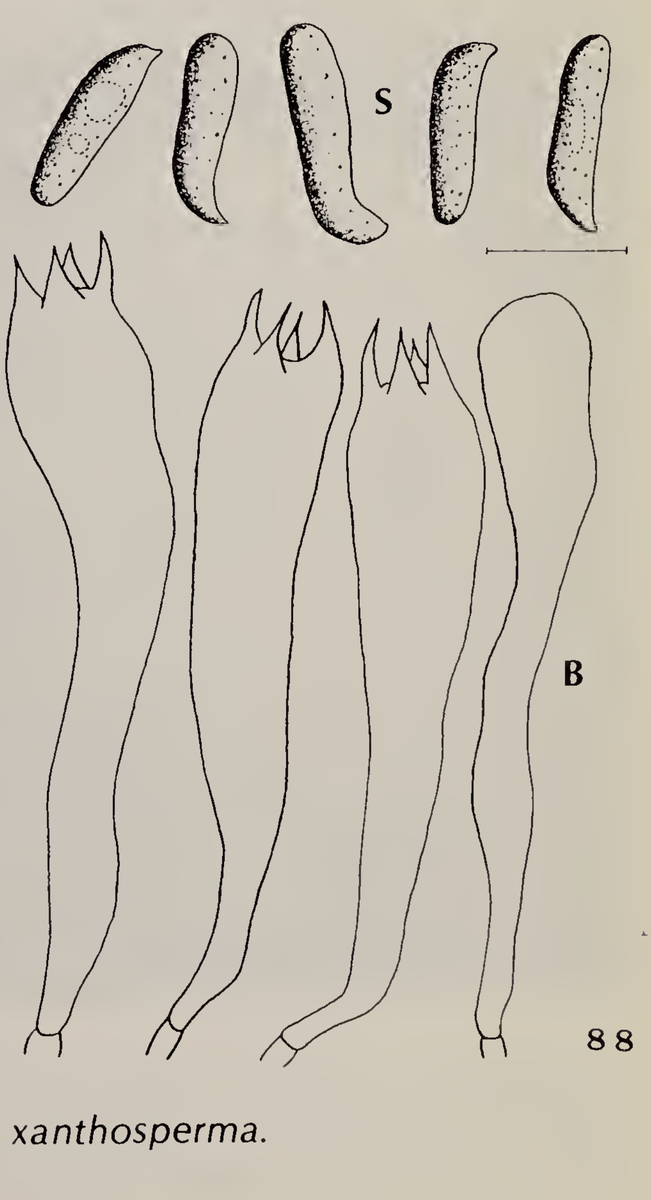
Wehmeyer (1935) has reported the hymenium to be "filled with gelatinous, granular, gloecystidium-like elements, possibly young basidia". When mounted in phloxine, some contextual hyphae showed greenish oil droplets.



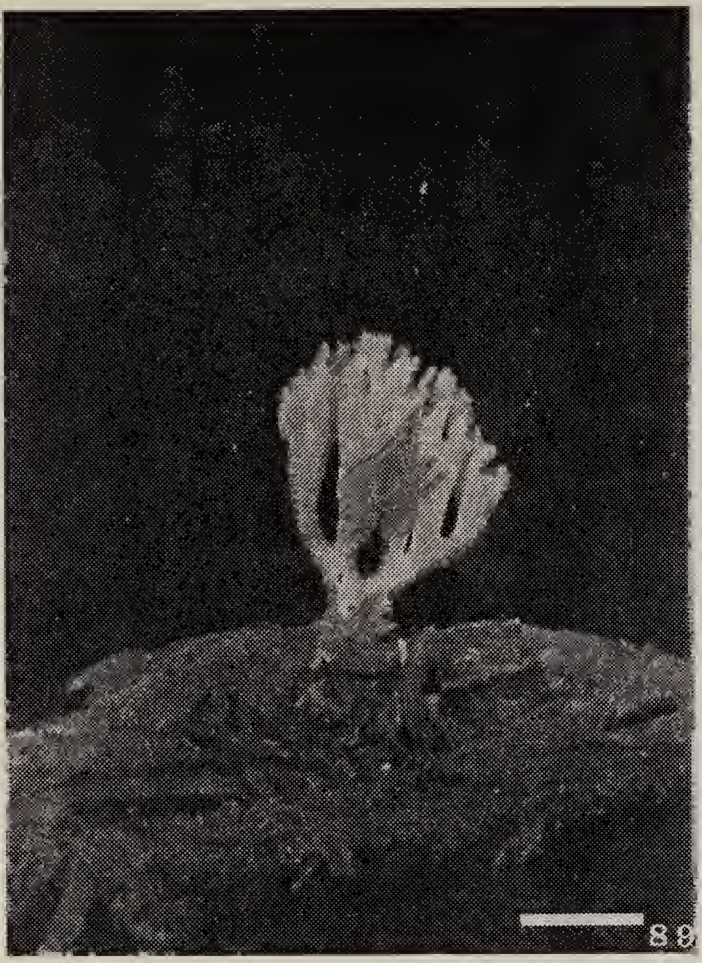


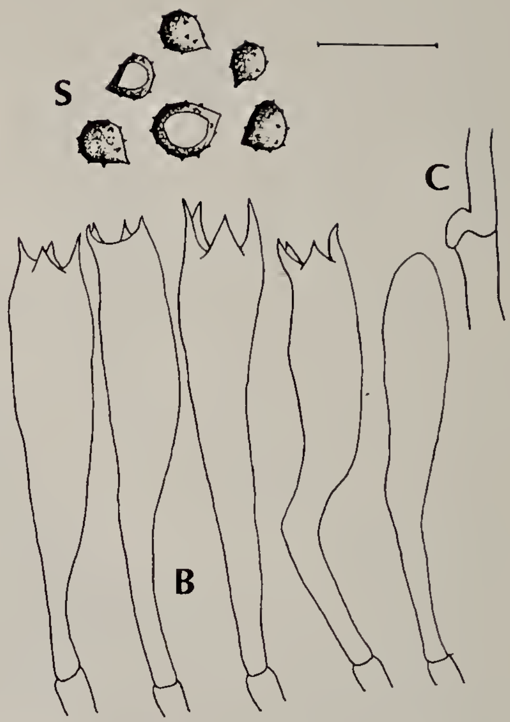
Figs 85, 86. *Ramaria suecica.*





Figs 87, 88. *Ramaria xanthosperma.*





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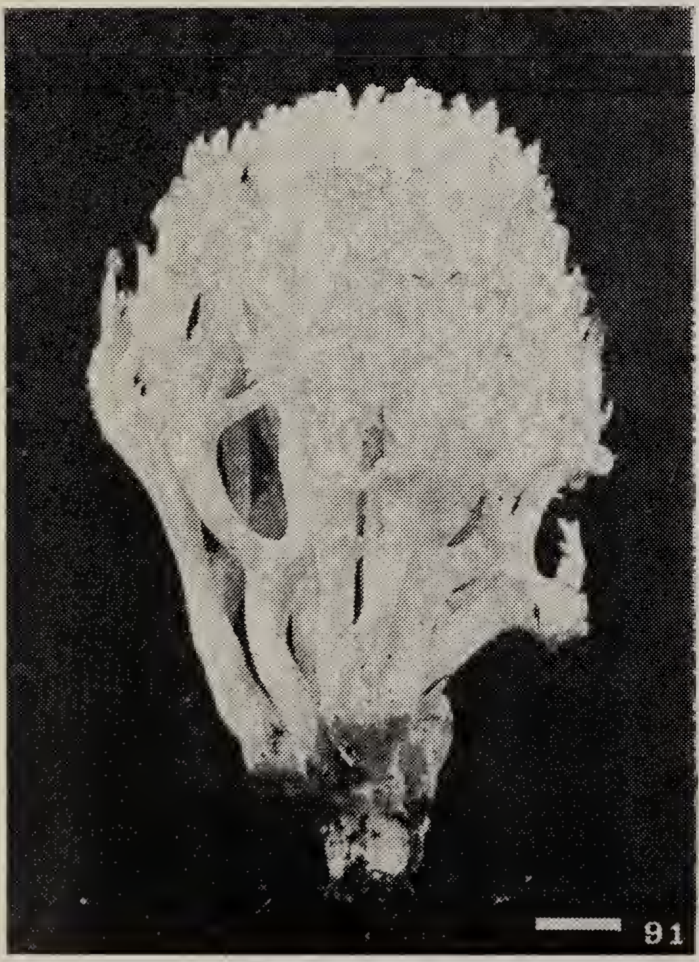
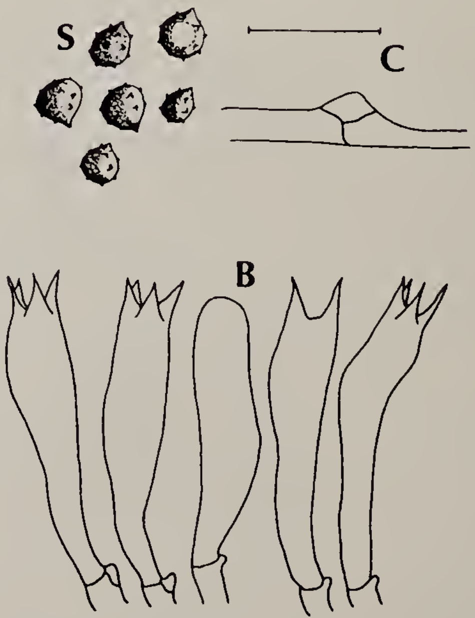
Figs 89, 90. *Ramariopsis crocea.*





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Figs 91, 92. *Ramariopsis kunzei.*

Circumscription of the Genus Ramariopsis

Ramariopsis Donk emend. Corner, Ann. Bot. Mem. 1: 636, 1950.

Type species: *R. kunzei* (Fr.) Donk, Rev. Niederl. Homobas., Aphyll. 2: 89, 1933.

Donk (1933) described *Ramariopsis* as a subgenus of *Clavaria* having branched fruit bodies, short basidia, and small, round or subellipsoid, finely asperulate hyaline spores. Corner (1950) excluded *C. subtilis, C. pyxidata* and *C. angulispora* and added several species traditionally placed in *Clavaria,* raising *Ramariopsis* to generic rank. The total number of species was raised to 12 when Petersen (1964) added 2 new species, *C. luteo-ochracea* and *C. minutula,* which Corner had placed in *Clavulinopsis.*

Petersen (1966) emended Corner's description to include smooth-spored and hysterochroic species, thereby including some species of *Clavulinopsis.*

Corner (1970) has agreed that with gathering evidence, *Ramariopsis* may merge with *Clavulinopsis,* but he still considers the echinulate spore and the branched fruiting body as distinctive marks of *Ramariopsis.* His description of the genus is as follows: "Fruit bodies branched, rarely simple, variously colored; branches radial, polychotomous or dichtomous. Spores white, ellipsoid or subglobose, finely verruculose or echinulate, 1-guttate. Basidia small to medium sized, 4-sterigmate, occasionally 2. Hyphae monomitic, inflating, clamped, with thin or slightly thickened walls, generally rather narrow".

The genus includes 10 species, mostly north temperate.

Key to the Species of Ramariopsis

1. Fruiting bodies 3-10 cm high, white, often tinged light red or tangerine: spores 2.5-4.0 x 2.5-4.5 μm, subglobose, finely echinulate .... *R. kunzei* p. 70
1. Fruiting bodies up to 5 cm high, deep orange; spores 3-5 x 3-3.5 μm, subglobose, asperulate .... *R. crocea* p. 69

Ramariopsis crocea (Fr.) Corner

Ann. Bot. Mem. 1: 638, 1950.

Clavaria crocea Fr., Syst. Mycol. 1: 472, 1821.
Clavaria kalchbrenneri Muell., Proc. Linn. Soc. N.S. W., 105, 1882.
Clavaria crocea (Fr.) Harter, Krypt. Fl. Mark Brand. 6: 164, 1910.

crocea (Gk)—saffron

Figs 89, 90

Fructifications: Solitary or gregarious, up to 5 cm tall, laxly branched dichotomously 2-4 times, cylindrical then flattened, axils lunate, tips acute or blunt, deep orange—5A8 (vivid orange yellow—66), drying carrot red—6B7 (deep orange—51). Context concolorous, tender, slightly elastic, not brittle. Stem distinct, up to 1 cm long, minutely furfuraceous. Spore deposit white. Odor and taste absent. Growing in the humus layer in mixed or deciduous woods on decaying leaves or wood.

Macrochemical Tests: No significant color reactions in $FeSO_4$, α-naphthol, guaiac tincture, guaiacol, 2% phenol, aniline.

Microscopic Structures: Spores 3.0-5.0 x 3.0-3.5 μm, hyaline, subglobose, asperulate. Basidia 15-25 x 4-5 μm; 4 sterigmata, 3-5 μm long. Hymenium 30-40 μm thick, agglutinated, not thickening; subhymenium 5-10 μm, of small rounded cells. Contextual hyphae 2.5-6.0 μm broad, subhymenial hyphae 2-3 μm. Clamp connections present.

Collections Examined: ACAD 12973, 20/9/77, Agriculture Canada Experimental Station, Kentville, Kings Co.; ACAD 12974, 25/9/77, Gospel Wood Road, Kings Co.

Discussion: Coker (1923) described this as a rare species. Corner (1950) reports *R. crocea* to be very rare in Europe but widespread in temperate or subtropical regions.

Corner (1950) has described the spores as 3.0-4.0 x 2.0-3.5 μm but points out that there appears to be variation in this character.

Spores from collections ACAD 12973 and ACAD 12974 measured 3.0-5.0 x 3.0-3.5 μm. Hyphal outgrowths, projecting 10-20 μm beyond the hymenial layer, were observed in ACAD 12973.

The rich orange coloration, delicate form and small size of *R. crocea* serve to identify this species in the field.

Ramariopsis kunzei (Fr.) Donk.

Rev. Niederl. Homobas., Aphyll. 2: 89, 1933.

Clavaria kunzei Fr., Syst. Mycol. 1: 474, 1821.
Clavaria chionea Pers., Mycol. Eur. 1: 161, 1822.
Clavaria subcorticalis Schw., Trans. Am. Philos. Soc. 2: 4, 182, 1832.
Lachnocladium subsimile B. & C., Grevillea 1: 161, 1873.
Clavaria velutina E. & E., North Am. Fungi, Ser. 2, No. 2024, 1888.
Clavulina kunzei (Fr.) Schroet., Cohn, Krypt. Fl. Schles., Pilze, 442, 1888.
Ramaria kunzei (Fr.) Quél., Flore Mycol. 464, 1888.
Clavaria asperula Atk., Ann. Mycol. 6: 54, 1908.
Clavaria asperulans Atk., Ann. Mycol. 6: 57, 1908.
Clavaria elongata Britz., Rev. Hym., 221, 1909.
Clavaria subcaespitosa Pk., Bull. N.Y. State Mus. 167: 39, 1913.
Lachnocladium subcorticale (Schw.) Burt, Ann. Mo. Bot. Gard. 9: 66, 1922.
kunzei—after Karl Sebastion Heinrich Kunze

Figs 91, 92

Fructifications: Solitary, gregarious or caespitose, 3-10 cm tall, loosely branched, polychotomous below, becoming narrow and dichotomous above, cylindrical, ending in forked tips either blunt or acute, axils rounded and narrow, snow white, often tinged light red-9A5 (strong yellowish pink-26) or tangerine-6B8 (strong orange-50), drying orange white-5A2 (pale orange yellow-73). Stem distinct, 0.5-2.0 cm long, sometimes becoming yellowish or pinkish at base, villous tomentose. Context concolorous varying from rather pliant and elastic to brittle. Spore deposit white. Odor and taste indistinct. Terrestrial, in deciduous or mixed woods.

Macrochemical Tests: No significant color reactions in $FeSO_4$, pyrogallol, α-naphthol, guaiac tincture, guaiacol, 2% phenol, aniline.

Microscopic Structures: Spores 3.5-4.0 x 2.5-4-5 μm, hyaline, globose to subglobose, finely echinulate, apiculate, 1-guttate. Basidia 12-20 x 4-5 μm; 2 or 4 sterigmata, 3-4 μm long. Hymenium 30 μm at first, thickening to 60-100 μm, agglutinated; subhymenium 7-10 μm. Contextual hyphae 3-5 μm broad, subhymenial hyphae 2-3 μm. Clamp connections present.

Collections Examined: ACAD 12975, 26/8/77, Scots Bay, Kings Co.; ACAD 12976, 12/9/77, Harrington woods, Kings Co.; ACAD 12977, 12/9/77, Harrington woods, Kings Co.

Discussion: Ramariopsis kunzei, the type of the genus, is a common and variable species (Corner 1950). It is recognized by its snow white color, delicate habit, tomentose stem and small, subglobose, finely echinulate spores.

Acknowledgements

We express sincere appreciation to Dr. K.A. Harrison (Research Associate, Acadia University) for his valuable advice throughout the course of this study.

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La Revue *Proceedings of the Nova Scotian Institute of Science* publie les travaux de l'Institut, des article originaux et des notes avant trait aux sciences naturelles aux Provinces atlantiques, surtout dans le domaines de la biologie et de la géologie. Les manuscrits peuvent être en anglais ou en français, e seront soumis à l'avis d'experts avant d'être acceptés.

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AN ANNOTATED INDEX OF THE FUNGI OF NOVA SCOTIA[1]

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This annotated index lists 2875 taxa of fungi and 197 of their more commonly used synonyms that have been reported in the literature or recorded by the author and others for Nova Scotia up to 1982. This geographical location with its maritime climate fosters a local flora, especially of fleshy fungi, that has been well documented. Many of the parasitic fungi listed are new records for the area and, as far as the author is aware, *Diaporthe caraganae* and *Taphrina rhizophora* are reported for the first time from North America. An undescribed species of *Goidanichiella* is included as well as 28 other unidentified species in 25 different genera. Many of the parasitic and saprophytic Fungi Imperfecti as well as recent collections of *Aleuria, Conocybe* and *Fayodia* are reported for the first time from this province.

Le présent index annoté dresse la liste des noms de 2875 espèces de champignons (et de 197 de leurs synonymes les plus usités) dont la présence en Nouvelle-Ecosse a été soit mentionnée dans la documentation écrite, soit signalée par l'auteur ou d'autres personnes, et ce jusqu'à 1982. Le climat maritime de cette région favorise une flore locale composée en particulier de champignons charnus et qui a été bien décrite. La présence dans la région de plusieurs des champignons parasites énumérés et, pour autant que l'auteur le sache, celles en Amérique du Nord de *Diaporthe caraganae* et de *Taphrina rhizophora* sont mentionnées pour la première fois. Il en va de même pour la présence en Nouvelle-Ecosse de plusieurs des espèces de Deutéromycètes parasite ou saprophytiques et de celle d'*Aleuria,* de *Conocybe* et de *Fayodia.* L'index inclut en outre une espèce non-décrite de *Goidanichiella,* de même que 28 autres espèces non-identifiées appartenant à 25 genres différents.

Introduction

The compilation of an annotated index of the fungi of Nova Scotia was undertaken to update nomenclature and to catalogue the many species of fungi reported in the literature and in local herbaria since the last list, prepared by Lewis E. Wehmeyer, appeared in 1950. In his "Historical" section, Wehmeyer noted published reports, their authors, and others who contributed to the knowledge of the fungi of the area of that time. Since then, many fungi have been identified and recorded as new collections or described as new species for this area.

Dr. K.A. Harrison, a former plant pathologist at the Research Station, Kentville, made extensive collections of local fungi and retained prepared specimens of most of them in the Kentville Mycological (KM) herbarium. In 1966, Harrison retired and this collection was moved to Ottawa and accessioned to the Department of Agriculture, Ottawa, Mycological Herbarium (DAOM). Since 1966, Harrison has added many specimens to the mycological herbaria located at Acadia University, Wolfville, and at the University of Michigan, Ann Arbor.

Many of the pathogenic and saprophytic organisms included here have been recorded in the Canadian Plant Disease Survey. Although a thorough search of the literature has not been made, the author has attempted to obtain as many as possible of the published records of fungi that have been found in Nova Scotia.

---

[1] Contribution No. 1746

Generally, collections and identification of fungal species have been undertaken by mycologists and pathologists working in Nova Scotia. The number of each pathological specimen (KP) retained at the Research Station, Kentville, was cited by Wehmeyer but these numbers are not included in this index. The date given with each species, as far as the author is aware, is the first recorded report of its occurrence in the province.

The names adopted for this index are for the most part those of the most recent published classification. A number of names that have been reduced to synonymy since previously listed, or otherwise altered by recent taxonomic changes, have been included and referred to their new names. An asterisk (*) before a name indicates a first report for the province.

In an attempt to bring the nomenclature up to modern usage, the author has frequently requested the aid of experts in the various groups. Without their generous response this index would lack much of the accuracy required for its preparation.

Remarks

The abbreviations of the various herbaria in which specimens and collections were recorded by Wehmeyer (1950) were as follows with added notations for this index.

B —Herbarium of Dow Vawter Baxter, School of Forestry and Conservation, University of Michigan, Ann Arbor, Mich.

KM —Herbarium of former Dominion Laboratory of Plant Pathology, now Research Station, Agricultural Centre, Kentville, N.S.; mycological collections, collected and determined largely by K.A. Harrison, and in 1966 accessioned to DAOM.

KP —Same herbarium, pathological collections, collected and determined largely by J.F. Hockey. KP numbers were cited by Wehmeyer but are not included in present index.

O —Formerly mycological herbarium, Division of Botany and Plant Pathology, Science Service, Department of Agriculture, Ottawa, Ont. Now DAOM.

OF —Numbers up to 8100 are repeated in collections of wood-inhabitating fungi in the Ottawa herbarium, and are preceded by F to distinguish them from the parallel series of numbers.

P —Collections made by A.R. Prince, Nova Scotia Agricultural College, Truro, N.S.

R Collections made by A.E. Roland, Nova Scotia Agricultural College, Truro, N.S.

W —Herbarium of Lewis E. Wehmeyer; purchased from Dr. Wehmeyer in 1967 and accessioned into the general collection at DAOM. In this index, where Wehmeyer did not make the original report, his herbarium numbers are prefixed by the initials L.E.W.

Additional herbaria included in this index and listed in Index Herbariorum, (ed. 7. Holmgren, P.K., Keuken, W. and Schofield, E.K. 1981. *Regnum Veg.* 106:1-452).

ACAD —E.C. Smith Herbarium, Department of Biology, Acadia University, Wolfville, N .S., B0P 1X0.

DAOM —National Mycological Herbarium, Biosystematics Research Institute, Ottawa, Ont., K1A 0C6.

IMI —Herbarium, Commonwealth Mycological Institute (CMI), Kew, Surrey, England. TW9 3AF.

MICH —The University Herbarium, the University of Michigan, Ann Arbor, Mich. 48104.

OAC —Guelph Herbarium, Department of Botany, University of Guelph, Guelph, Ont. N1G 2W1.

TENN —Herbarium, Department of Botany, University of Tennessee, Knoxville, Tenn., 37916.

TRTC —Cryptogamic Herbarium, Department of Botany, University of Toronto, Toronto, Ont., M5S 1A1.

Mycologists, plant pathologists, university students, and many others have contributed to the fungal collections reported from Nova Scotia. The following were the collectors and authorities for identification of species. The initials following the surname in parentheses were those used in the text.

J. Adams (J.A.), M.E. Alger (M.E.A.), R. (Horner) Arnold (R.H.A.), J.C. Arthur (J.C.A.), R.E. Balch (R.E.B.), D.J.S. Barr (D.J.S.B.), G.L. Barron (G.L.B.), D.V. Baxter (D.V.B.), R.J. Baylis (R.J.B.), R.A. Bennett (R.A.B.), H.E. Bigelow (H.E.B.), C.A. Bird (C.A.B.), C.J. Bird (C.J.B.), J. Bissett (J.B.), W.S. Blair (W.S.B.), G.H. Boerema (G.H.B.), G.J. Boland (G.J.B.), J.A. Boyle (J.A.B.), D. Brewer (D.B.), A.M. Brown (A.M.B.), C.A. Brown (C.A.B.), R.F. Cain (R.F.C.), E.K. Cash (E.K.C.), K. Cejp (K.Ce.), W.C. Coker (W.C.C.), I.L. Conners (I.L.C.), W.B. Cooke (W.B.C.), M.P. Corlett (M.P.C.), J.N. Couch (J.N.C.), D.W. Creelman (D.W.C.), K. Cronin (K.Cr.), I.H. Crowell (I.H.C.), S. Cunningham (S.Cun.), J. Curtis (J.Cur.), S. Curtis (S.Cur.), G.D. Darker (G.D.D.), A.G. Davidson (A.G.D.), J. Dearness (J.D.), R.W. Delbridge (R.W.D.), S.N.F. Demmons (S.F.D.), E.A. Dick (E.A.D.), C.W. Dodge (C.W.D.), M.A. Donk (M.A.D.), E.L. Eaton (E.L.E.), M.E. Elliott (M.E.E.), J.S. Erskine (J.S.E.), D.E. Etheridge (D.E.E.), J.H. Faull (J.H.F.), W.P. Fraser (W.P.F.), J. Ginns (J.G.), W.L. Gordon (W.L.G.), C.O. Gourley (C.O.G.), P.M. Grainger (P.M.G.), J.W. Groves (J.W.G.), D.W. Grund (D.W.G.), H.T. Gussow (H.T.G.), G.G. Hahn (G.G.H.), I.V. Hall (I.V.H.), R.E. Halling (R.E.H.), B.D. Halsted (B.D.H.), J.R. Hardison (J.R.H.), E.L. Harris (E.L.H.), K.A. Harrison (K.A.H.), D.A. Haughn (D.A.H.), J.H. Herbert (J.H.H.), G.H. Hicks (G.H.H.), J.F. Hockey (J.F.H.), G.W. Hope (G.W.H.), S.J. Hughes (S.J.H.), H.S. Jackson (H.S.J.), T. Johnson (T.J.), B.B. Kanouse (B.B.K.), A. Kelsall (A.K.), J.A. Kelsey (J.A.K.), W.B. Kendrick (W.B.K.), R.M. Lewis (R.M.L.), D.L. Linder (D.L.L.), V. Litschauer (V.L.), C.L. Lockhart (C.L.L.), M.L. Lohman (M.L.L.), J.L. Lowe (J.L.L.), B.J. McAfee (B.J.M.), T.H. MacBride (T.H.M.), J.B. MacCurry (J.B.M.), W.C. MacDonald (W.C.M.), A.H. MacKay (A.H.M.), J.W. MacLellan (J.W.M.), A.A. MacNab (A.A.M.), R. MacRae (R.M.), L.P. Magasi (L.P.M.), D. Malloch (D.M.), J.M. Manley (J.M.M.), G.W. Martin (G.W.M.), D.E. McCuish (D.E.M.), W.K. McCulloch (W.K.M.), J.E. Milligan (J.E.M.), A.J. Mix (A.J.M), G.L. Moody (G.L.M.), C.L. Moore (C.L.M.), S.F. Murrin (S.F.M.), H.H. Mussels (H.H.M.), G.A. Neish (G.A.N.), N.L. Nickerson (N.L.N.), M.K. Nobles (M.K.N.), V.J. Nordin (V.J.N.), P. Olexia (P.O.), A.H.S. Onions (A.H.S.O.), L.O. Overholts (L.O.O.), E.T. Parker (E.T.P.), J.A. Parmelee (J.A.P.), R.H. Peterson (R.H.P.), A.D. Pickett (A.D.P.), K.A. Pirozynski (K.A.P.), A.R. Prince (A.R.P.), K.R.S. Quinney (K.R.S.Q.), T.L. Robar (T.L.R.), C.T. Rogerson (C.T.R.), A.E. Roland (A.E.R.), F. Roll-Hansen (F.R.H.), R.G. Ross (R.G.R.), D.B.O. Savile (D.B.O.S.), F.J. Seaver (F.J.S.), W.P. Shaw (W.P.S.), C.L. Shear (C.L.S.), R.A. Shoemaker (R.A.S.), A.J. Skolko (A.J.S.), G.G. Smeltzer (G.G.S.), A.H. Smith

(A.H.S.), J. Somers (Sommers) (J.S.), R. Stark (R.S.), H.L. Stewart (H.L.S.), D.E. Stuntz (D.E.S.), H. Swaine (H.S.), J.M. Swaine (J.M.S.), A. Taylor (A.T.), C.F. Taylor (C.F.T.), F.S. Thatcher (F.S.T.), W. Tinkham (W.T.), R.W. Ward (R.W.W.), L.E. Wehmeyer (L.E.W.), L.K. Weresub (L.K.W.), E.T. Wodehouse (Butler) (E.T.W.), and G.L.I. Zundel (G.L.I.Z.).

The names of several others, who are cited only once or for relatively few species, appear in the text.

List of Species

Absidia coerulea Bain. *in* Bull. Soc. Bot. Fr. 1:184. 1889.
From milled peat, *Sphagnum* sp. Kings Co. 1961-C.O.G.
Absidia corymbifera (Cohn) Sacc. & Trott. *in* Saccardo, Syll. Fung. 21:825. 1912.
Isolated from soil. Cumberland Co. 1971-D.B. et al.
Absidia glauca Hagem. *in* Vidensk. Selsk. Skrift. 1(7):43. 1907.
On rootlets of *Betula lutea* Michx. f. (yellow birch). 1951. (For. Insect Dis. Surv.:121. 1951).
Absidia spinosa Lendner *in* Bull. Herb. Boiss., Sér. 2, 7:250. 1907.
Isolated from soil. Cumberland Co. 1971-D.B. et al.
Acanthorhynchus vaccinii Shear *in* Bull. Torrey Bot. Club 34:134. 1907.
On *Vaccinium macrocarpon* Ait. (cranberry). Kings Co. 1907-C.L.S.
Acetabula platypodia (Boud.) Sacc. & Trav. *in* Saccardo, Syll. Fung. 19:4. 1910.
Macropodia platypodia (Boud.) Dodge.
Paxina platypodia (Boud.) Seav.
On soil. Colchester Co. 18 July 1931-L.E.W. (W-1080 leg. A.H.S., det. F.J.S.).
Acetabula sulcata (Pers.) Fckl. *in* Symb. Mycol.:330. 1869.
See *Helvella acetabulum* (Fr.) Quél.
Acetabula vulgaris Fckl. *in* Symb. Mycol.:330. 1869.
Paxina acetabulum (L.) Kuntze.
On soil and duff. Hants and Kings Co. 1935-K.A.H. (KM-1107, 1108, 1169, 1170, 1171 *in* DAOM).
Achlya americana Humphrey *in* Trans. Am. Philos. Soc. (N.S.) 17:116. 1893.
From Cape Breton and Pictou Co. 1913-C.L.M.
Achlya apiculata de Bary *in* Oesterr. Bot. Z., 46:635. 1888.
From Cape Breton and Pictou Co. 1913-C.L.M.
Achlya cambrica (Trow) Johnson *in* The Genus *Achlya,* Univ. Mich. Press, Ann Arbor:85. 1956.
From Cape Breton Co. 1913-C.L.M.
Achlya colorata Pringsh. *in* Sitzungsber. Akad. Berl. 1882:889. 1882.
From Cape Breton Co. 1913-C.L.M.
Achlya deBaryana Humphrey *in* Trans. Am. Philos. Soc. (N.S.), 17:117. 1893.
From Cape Breton Co. 1913-C.L.M.
Achlya polyandra Hildebrand *in* Jahrb. Wiss. Bot., 6:258. 1867-68.
From Pictou Co. 1913-C.L.M.
Achlya racemosa Hildebrand *in* Jahrb. Wiss. Bot., 6:249. 1867-68.
From Cape Breton Co. 1913-C.L.M.
Achlya treleaseana (Humphrey) Kauff. *in* The Genus *Achlya,* Univ. Mich Press, Ann Arbor:44. 1956.
From Cape Breton and Pictou Co. 1913-C.L.M.
Acremoniella atra (Cda.) Sacc. *in* Syll. Fung. 4:302. 1886.
On calyx of *Fragaria* sp. (cultivated strawberry). Kings Co. June 1963-C.O.G., W.B.K.

Acrostalagmus albus Preuss *in* Linnaea 24:126. 1851.
Isolated from soil. Cumberland Co. 1971-D.B. et al.

Acrostalagmus obovatus Drechsler *in* Phytopathology 31:784. 1941.
In association with nematodes from alfalfa, compost, dung (chicken, cow, hog, horse, sheep) and pear orchard soil. Kings Co. 1980-M.E.A.

Actinomucor repens Schostak. *in* Ber. Dtsch. Bot. Ges.:155. 1898.
From calyx of *Fragaria* sp. (cultivated strawberry). Kings Co. 16 May 1962-C.O.G.

Actinopelte dryina (Sacc.) Höhn. *in* Mitt. Bot. Inst. Tech. Hochsch. Wien 2:69. 1925.
On *Quercus rubra* L. (red oak). 1975-L.P.M., J.M.M.

Agaricus arvensis Schaeff. ex Fr. *in* Hymen. Eur.:278. 1885.
Psalliota arvensis (Fr.) Quél.
In pastures and on dykelands. Halifax and Kings Co. 1881-J.S. (A.H.M.) (KM-926, 927 *in* DAOM, K.A.H.).

Agaricus campestris L. ex Fr. *in* Syst. Mycol. 1:281. 1821.
Psalliota campestris (Fr.) Quél.
In pastures and grassy marshes. General. 1880-J.S. (A.H.M.) (KM-473 *in* DAOM, K.A.H.) (L.E.W.-749)

Agaricus diminutivus Pk. *in* Bull. Buffalo Soc. Nat. Sci. 1:53. 1873.
Psalliota diminutiva Pk.
On humus in mixed woods. Colchester Co. 21 July 1931-A.H.S., L.E.W. (W-648, 725).

Agaricus haemorrhoidarius Schulz. *in* Kalchbr. Icon. Hymen.:29. 1872.
Psalliota haemorrhoidaria (Schulz.) Rich. & Roze.
In conifer woods. King Co. 1928-K.A.H.

★**Agaricus rodmani** Pk. *in* Annu. Rep. N.Y. State Mus. 36:45. 1884.
Agaricus bitorquis (Quél.) Sacc.
Psalliota rodmani Pk.
Pushing up through asphalt-paved driveways and along sidewalks. Kings Co. Aug. 1977-K.A.H., C.O.G.

Agaricus rugosodisca Pk. *in* Bull. Buffalo Soc. Nat. Sci. 1:48. 1873.
Omphalia rugosodiscus Pk.
On *Abies balsamea* (L.) Mill. (balsam fir). Colchester Co. 20 July 1931-A.H.S., L.E.W. (W-686) (KM-411 *in* DAOM, K.A.H.).

Agaricus semotus Fr. *in* Monogr. Hymen. Suec. 2:347. 1863.
On ground in fields and lawns. Kings Co. 25 August 1953-K.A.H. (DAOM 39191).

Agaricus silvicola (Vitt.) Pk. *in* Edible Fungi, tab. 59, fig. 1-7. 1883.
Psalliota abruptibulba Pk.
Under mixed hardwoods. Colchester and Kings Co. 1928-K.A.H. (KM-474 *in* DAOM) (L.E.W.-638, 638a).

Agaricus subrufescens Pk. *in* Annu. Rep. N.Y. State Mus. 46:25. 1893.
Under mixed woods of *Acer* sp. (maple) and *Fagus* sp. (beech). Colchester Co. 12 Aug. 1931-A.H.S., L.E.W. (W-731).

Agaricus villaticus Brond. *in* Pl. Crypt. Agen. 26. pl. 7. 1828.
Psalliota villatica Brond. (1829).
From Yarmouth Co. 24 Sept. 1958-(Brown) K.A.H. (KM-4144).

Agrocybe acericola (Pk.) Sing. *in* Lilloa 22:492. 1951.
Pholiota acericola Pk.
On decaying trunks of *Fagus grandifolia* Ehrh. (beech), Colchester and Kings Co. 10 July 1931-A.H.S., L.E.W. (W-602, 602a) (KM-424, 883 *in* DAOM, K.A.H.).

Agrocybe aegerita (Brig.) Sing. *in* Tr. Bot. Inst. Komarova, Ser. 11, 6:451. 1950.
Agrocybe cylindracea (DC ex Fr.) Maire (1938).
Pholiota aegerita (Brig.) Quél.
Pholiota capistrata (Cke.) Sacc.
From Halifax Co. 1886-J.S. (A.H.M.) (as *Agaricus capistratus).* Probably this species fide A.H.S.

Agrocybe dura (Bolt. ex Fr.) Sing. *in* Beih. Bot. Zentralbl., 56, Abt. B, 1-2:167. 1936.
Pholiota vermiflua (Pk.) Sacc.
In open fields or on lawns. Colchester and Kings Co. 18 Aug. 1931-A.H.S., L.E.W. (W-772) (KM-433-445, 880, 886, 2723, 2725 *in* DAOM, K.A.H.)

Agrocybe erebia (Fr.) Sing. in Ann. Mycol. 34:343. 1936.
Pholiota erebia (Fr.) Quél.
On old logs and debris. Colchester and Kings Co. 21 Aug. 1931-A.H.S., L.E.W. (W-805) (KM-1779, 1784, 5293 *in* DAOM, K.A.H. as *P. erebia).*

Agrocybe firma (Pk.) Sing. *in* Rev. Mycol. 5:11. 1940
Naucoria firma Pk.
On sticks of *Betula* sp. (birch). Colchester Co. 18 Aug. 1931-A.H.S., L.E.W. (W-785).

Agrocybe pediades (Pers. ex. Fr.) Fayod *in* Ann. Sci. Nat. Bot., Sér. 7, 9:358. 1889.
Naucoria pediades (Fr.) Kummer.
From open spaces. Halifax and Lunenburg Co. 1880-J.S. (A.H.M.)

Agrocybe praecox (Pers. ex Fr.) Fayod *in* Ann. Sci. Nat. Bot., Sér. 7, 9:358. 1889.
Pholiota praecox (Pers. ex Fr.) Kummer.
In orchard of *Malus pumila* Mill. (apple). Kings Co. 15 June 1953-K.A.H. (KM-2720 coll. A.W. MacPhee, 5290 *in* DAOM).

Agrocybe semiorbicularis (Bull. ex. St. Amans) Fayod *in* Ann. Sci. Nat. Bot., Sér. 7, 9:358. 1889.
Naucoria semiorbicularis (Fr.) Quél.
In Groves' sense: *A. pediades* (Pers. ex Fr.) Fayod fide S.A. Redhead.
On grassy areas. Halifax and Kings Co. 1881-J.S. (KM-404, 2711 *in* DAOM, K.A.H.)

Albatrellus caeruleoporus (Pk.) Pouz. *in* Folia Geobot. Phytotax. Bohemosl. 1:358. 1966.
Polyporus caeruleoporus Pk.
On soil near trees of *Betula* spp. (birch). Hants and Kings Co. 15 Sept 1931-K.A.H. (KM-14, 14a, 1241, 1244, 5146 *in* DAOM) (O-F2229) (ACAD 9165, 9948, 12335).

Albatrellus confluens (Alb. & Schw. ex Fr.) Kotl. & Pouz. *in* Česká Mykol. 11:154. 1957.
Polyporus confluens (Alb. & Schw. ex Fr.) Fr.
Scutiger confluens (Alb & Schw. ex. Fr.) Bondarzew & Sing.
On soil under woods. Colchester, Hants and Kings Co. 22 July 1931-L.E.W. (W-1115a,d coll. A.H.S.) (KM-12, 13, 13a, 792, 793, 1243, 4262 *in* DAOM, K.A.H.) (O-F2224, 2225) (ACAD 2152).

Albatrellus cristatus (Schaeff. ex. Fr.) Kotl. & Pouz. *in* Česká Mykol. 11:154. 1957.
Polyporus cristatus Pers. ex. Fr.
In coniferous woods. Kings Co. 24 Oct. 1975-D.W.G. (ACAD 11534).

Albatrellus dispansus (Lloyd) Canfield & Gilbertson *in* Mycologia 63:965. 1971.
Polyporus dispansus Lloyd.
Polyporus illudens Overh.
Poria illudens Overh. & Lowe.

On *Abies balsamea* (L.) Mill. (balsam fir). Kings Co. 1975-L.P.M., J.M.M. (WS-312 *in* ACAD, 28 Oct. 1976, coll. W.P.S.)

Albatrellus hirtus *(Cke.) Donk in* K. Ned. Akad. Wet. Proc. Amsterdam, Ser. C, 74:4. 1971.
Fomes hirtus (Quél). Cke.
Polyporus hirtus Quél.
On *Abies balsamea* (L.) Mill. (balsam fir) and *Picea* sp. (spruce). Colchester, Kings and Richmond Co. 26 Aug. 1931-L.E.W. (W-1115b det. J.L.L.) (KM-4272, 5160 *in* DAOM, K.A.H., det. R.M.) (WS-208, 221 *in* ACAD) (ACAD 4272, 12337).

Albatrellus ovinus (Schaeff. ex Fr.) Kotl. & Pouz. *in* Česká Mykol 11:154. 1957.
Polyporus ovinus Schaeff. ex Fr.
Scutiger ovinus (Schaeff ex Fr.) Murr.
On soil. Annapolis, Antigonish, Colchester, Hants, Kings and Richmond Co. 22 July 1931-L.E.W. (W-1115, 1115c) (KM-10, 11, 11a, 803, 1247, 5238 *in* DAOM, K.A.H.) (O-F2226, 2227) (WS-187, 222, 224, 226, 254, 290 *in* ACAD).

Albugo bliti (Biv.-Bern.) Kuntze. *in* Rev. Gen. Pl. 2:658. 1891.
On *Amaranthus retroflexus.* L. (red-root pigweed). Kings Co. 22 Aug. 1932-J.F.H.

Albugo cruciferarum S.F. Gray *in* Nat. Arr. Br. Pl. 1:540. 1821.
On *Capsella bursa-pastoris* (L.) Medic. (shepherd's purse), *Dentari diphylla* Michx. (pepper root) and *Raphanus raphanistrum* L. (wild radish). Kings Co. 12 Sept. 1934-J.F.H.

Albugo quadrata (Wallr.) S.D. Baker *in* Trans. R. Soc. N.Z. 82:991. 1955.
Albugo portulacae (DC.) Kuntze.
On *Portulaca oleracea* L. (purslane). Kings Co. 31 July 1929-J.F.H.

Albugo tragopogonis (Pers.) S.F. Gray *in* Nat. Arr. Br. Pl. 1:540. 1821.
On *Cirsium arvense* (L.) Scop. (Canada thistle). Colchester Co. 13 Aug. 1940-J.F.H.

Aleuria aurantia (Pers.) Fckl. *in* Symb. Mycol.:325. 1869.
On damp soil in woods and open places. Kings Co. 1928-K.A.H. (KM-1130 *in* DAOM).

★**Aleuria rhenana** Fckl. *in* Symb. Mycol.:325. 1869.
On soil in coniferous woods. Kings Co. 16 July 1981-K.A.H. (Harrison *in* ACAD).

Aleurocystidiellum subcruentum (Berk. & Curt.) Lemke *in* Can. J. Bot. 42:213. 1964.
Aleurodiscus subscruentatus (Berk. & Curt.) Burt.
Sterem subcruenatum Berk. & Curt.
On *Picea glauca* (Moench) Voss (white spruce). Colchester Co. 26 July 1929-L.E.W. (W-77, 77a) (TRTC).

Aleurodiscus abietis Jacks. & Lemke *in* Can. J. Bot. 42:225. 1964.
On *Abies balsamea* (L.) Mill. (balsam fir). Colchester Co. 9 July 1931-L.E.W. (W-464) (TRTC).

Aleurodiscus amorphus (Pers.) Rabenh. ex Cke. *in* Grevillea 3:137. 1875.
On *Abies balsamea* (L.) Mill. (balsam fir). Colchester, Kings and Victoria Co. 29 June 1931-L.E.W. (W-331, 331a,b) (KM-948, 2764, 3117 *in* DAOM, K.A.H.).

Aleurodiscus lividocoeruleus (Karst.) Lemke *in* Can. J. Bot. 42:252. 1964.
Corticium lividocoeruleum Karst.
Gloeocystidium lividocoeruleum (Karst.) Höhn. & Litsch.
On *Picea* sp. (spruce) and other decayed wood. 1964-Lemke, P.A.

Aleurodiscus oakesii (Berk. & Curt.) Höhn. & Litsch. *in* K. Akad. Wiss. Wien Math. Nat. Kl. Sitzungsber. 116:802. 1907.
On *Ostrya virginiana* (Mill.) K. Koch (ironwood) and *Salix* sp. (willow). Kings Co. 21 Mar. 1943-R.M.L. (KM-1336 *in* DAOM, R.M.L. det. R.M.) (KM-1667 *in* DAOM, K.A.H.).

Aleurodiscus roseus (Pers. ex Fr.) Höhn. & Litsch. *in* K. Akad. Wiss. Wien Math.-Nat. Kl. Sitzungsber. 115(1):1568. 1906.
On *Ulmus* sp. (elm). Kings Co. 7 Jan. 1954-K.A.H. (KM-3059 *in* DAOM det. Joan Spiers).

Aleurodiscus sp.
On wood of *Picea* sp. (spruce). Kings Co. 8 Nov. 1954-K.A.H. (KM-3074 *in* DAOM sensu Joan Spiers).

Alnicola melinoides (Fr. sensu Ricken, Sing.) Kühner *in* Botaniste 17:175-176. 1926.
Naucoria melinoides (Fr.) Quél.
From Halifax Co. 1881-J.S.(A.H.M.) (sub *Agaricus).*

Alpova olivaceoniger (A.H. Smith) Trappe *in* Nova Hedwigia 51:295. 1975.
Rhizopogon olivaceoniger A.H. Smith.
Under *Picea* sp. (spruce) and *Pinus* sp. (pine). Annapolis and Kings Co. 27 Sept. 1938-K.A.H. (MICH 4666 type) (KM-4666, 4668-4676, 4684-4693, 4695, 4696 *in* DAOM) (ACAD 4668-4671, 11233 det. A.H.S., K.A.H.).

Alternaria alternata (Fr.) Keissl. *in* Beih. Bot. Zentralbl., 29:434. 1912.
Alternaria tenuis auct. sensu Wiltsh.
On *Beta vulgaris* var. *cicla* (L.) Moq. (Swiss chard), *Cucurbita maxima* Duchesne (squash), *Fragaria* sp. (cultivated strawberry), *Lycopersicon esculentum* Mill. (tomato), *Phaseolus vulgaris* L. (bean), *Rhododendron* sp. and *Vicia faba* L. (broadbean). General. 25 Aug. 1943-J.F.H. (DAOM 145877 on *Rhododendron)* (Caused storage decay of *Pyrus communis* L. (pear). 1972-C.L.L. and F.R. Forsythe).

★**Alternaria alternata** (Fr.) Keissl. f. sp. **fragariae** Dingley *in* N. Z. J. Agric. Res. 13:334. 1970.
On leaves of *Fragaria* sp. (cultivated strawberry). Kings Co. 3 Oct. 1972-C.O.G. (DAOM 142289).

Alternaria brassicae (Berk.) Sacc. *in* Michelia 2:129. 1880.
On leaves of *Brassica oleracea* L. var. *capitata* L. (cabbage) and *Brassica rapa* L. (turnip). Kings Co. 1 Sept. 1951-K.A.H.

Alternaria brassicicola (Schw.) Wiltsh. *in* Commonw. Mycol. Inst. Mycol. Pap. 20:8. 1947.
On *Brassica napobrassica* (L.) Mill. (Swede turnip), *B. oleracea* L. var. *capitata* L. (cabbage) and *B. oleracea* L. var. *botrytis* L. (cauliflower). General. 19 Aug. 1942-J.F.H.

Alternaria cucumerina (Ell. & Ev.) J.A. Elliott *in* Am. J. Bot. 4:472. 1917.
On *Cucumis sativus* L. (cucumber) in greenhouse. General. 14 June 1935-J.F.H.

Alternaria dauci (Kühn) Groves & Skolko *in* Can. J. Res., C, 22:222. 1944.
On *Daucus carota* var. *sativa* DC. (carrot). General. 12 Sept. 1938-J.F.H.

★**Alternaria dianthi** Stevens & Hall *in* Bot. Gaz. 47:409-413. 1909.
On *Dianthus armeria* L. (deptford pink). Kings Co. 11 July 1978-C.O.G. coll. I.V.H.

Alternaria maritima Sutherland *in* New Phytol. 15:46. 1916.
On driftwood. Kings Co. 1970-G.A.N.

Alternaria porri (Ell.) Cif. *in* J. Dep. Agric. Porto Rico 14:40. 1930.
On *Allium cepa* L. (onion). Kings and Pictou Co. 27 Aug. 1931. (O-911 det. J.W.G.).

Alternaria radicina Meier, Drechsler & Eddy *in* Phytopathology 12:157-166. 1922.
Stemphylium radicinum (Meier, Drechsler & Eddy) Neegaard.
On *Daucus carota* L. var. *sativa* DC. (cultivated carrot). Kings Co. 7 July 1943-G.W.H.

★**Alternaria raphani** Groves & Skolko *in* Can. J. Res. C, 22:227. 1944.
On *Tagetes* sp. (marigold). Lunenburg Co. 27 Aug. 1974-R.G.R., C.O.G. (DAOM 147450).

Alternaria solani Sorauer *in* Z. Pflanzenkr., 6:6. 1896.
Alternaria amaranthi (Pk.) van Hook.
On *Amaranthus hybridus* L. (green amaranth), *Lycopersicon esculentum* Mill. (tomato) and *Solanum tuberosum* L. (potato). General. 8 July 1925-J.F.H., C.F.T.

★**Alternaria tenuissima** (Fr.) Wiltsh, *in* Trans. Br. Mycol. Soc., 18:157. 1933.
On *Rhododendron* spp., *Rubus idaeus* L. (red raspberry) and *Zea mays* L. (corn). Kings Co. 8 July 1966-C.O.G. (DAOM 145876).

Alternaria tomato (Cke.) Weber *in* Bull. Fla. Agric. Exp. Stn. 332:22. 1939.
On fruit of *Lycopersicon esculentum* Mill. (tomato). Kings Co. 10 Sept. 1945-J.F.H.

Alternaria zinniae M.B. Ellis *in* Commonw. Mycol. Inst. Mycol. Pap. 131:22-25. 1972.
On leaves of *Zinnia elegans* Jacq. (zinnia). Kings Co. 20 Aug. 1952-D.W.C.

Amanita atkinsoniana Coker *in* J. Elisha Mitchell Sci. Soc. 33:84. 1917.
In coniferous woods. Digby and Kings Co. 25 Aug. 1966-H.L.S. (ACAD HS 54, 266, 277) (ACAD AU 1725 coll. K.A.H., 17 Sept. 1952 as *A. solitaria* Bull. ex Fr.).

Amanita baccata (Fr.) Gill *in* Hymén. Fr. 50. 1874.
Amanita adnata Smith.
Amanitopsis baccata (Fr.) Sacc.
Under *Picea* sp. (spruce). Halifax Co. 1880-J.S. (A.H.M.) (as *A. adnata*) A doubtful determination.

Amanita bisporigera Atk. *in* Bot. Gaz. 41:348. 1906.
Under *Tsuga* sp. (hemlock). Colchester Co. 19 Aug. 1931-A.H.S., L.E.W. (W-798).

Amanita brunnescens Atk. var. **brunnescens** *in* Proc. Am. Philos. Soc. 57:354. 1918.
On sandy lawns on humus under *Picea* sp. (spruce). General. 1890-J.S. (A.H.M.) (KM-161, 163, 820, 820, 5130 *in* DAOM, K.A.H.) (L.E.W.-631).

Amanita brunnescens Atk. var. **pallida** Krieger *in* Mycologia 29:308. 1927.
Under *Fagus grandifolia* Ehrh. (beech). Lunenburg Co. 10 Aug. 1967-H.L.S. (ACAD H.S. 247, 256).

★**Amanita chlorinosma** (Austin) Lloyd *in* Mycol. Writ. 1:7-15. 1898.
Tricholoma chlorinosmum Pk.
In wooded ravine. Kings Co. 17 Sept. 1957-K.A.H. (KM-3918 *in* DAOM).

Amanita citrina (Schaeff. ex Fr.) S.F. Gray *in* Nat. Arr. Br. Pl. 1:599. 1821.
Amanita mappa (Batsch ex Fr.) Quél.
On sandy soil in woods. Kings Co. 1928-K.A.H. (KM-158, 819, 1421, 2531 *in* DAOM).

Amanita excelsa (Fr.) Kummer *in* Führ. in Pilzkd:25. 1882.
Amanita spissa (Fr.) Kummer.
Rare. Under *Larix laricina* (Du Roi) K. Koch (larch) and *Picea* sp. (spruce). Halifax and Kings Co. 1881-J.S. (A.H.M.) (ACAD HS-2).

Amanita farinosa Schw. *in* Schrift. Naturforsch. Ges. Leipzig, 1:79. 1822.
Amanitopsis farinosa (Schw.) Atk.
On ground in wooded area. Kings Co. 23 Aug. 1969-H.L.S. (ACAD HS-325, 329, 362).

Amanita flavoconia Atk. *in* J. Mycol. 8:110. 1902.
In coniferous and mixed woods. Colchester, Kings and Pictou Co. 1913-A.H.M. (KM-151, 152, 814, 2533 *in* DAOM, K.A.H.) L.E.W.-143, 199, 603).

Amanita flavorubens Berk. & Mont. *in* Montagne, Syl. Gen. Spec. Crypt. Paris. 1846, var. **gracilis** Grund & Harrison *in* Proc. N.S. Inst. Sci. 31:117. 1981.
Amanita flavorubescens Atk. (J. Mycol. 8:111. 1902).
Under *Quercus rubra* L. (red oak). Kings Co. 20 July 1930-K.A.H. (KM-153, 817, 818, 2534, 2535, *in* DAOM) (ACAD 13019 type, D.W.G., K.A.H.)

Amanita frostiana (Pk.) Sacc. *in* Syll. Fung. 5:14. 1887.
In mixed woods. General 1913-A.H.M. (DAOM 44444, K.A.H.).

Amanita gemmata (Fr.) Bertillon *in* Bechambre Diet. Encycl. Sci. Med. 1(3):496. 1866.
Amanita gemmata (Fr.) Gill. (1874).
Amanita junquillea Quél.
Amanita russuloides (Pk.) Sacc.
Under conifers. Kings Co. 26 June 1931-K.A.H. (KM-155, 156 as *A. junquillea in* ACAD) (KM-1405 *in* DAOM) (DAOM 128138 det. Sheila Thompson) (ACAD HS-49, 361).

Amanita macrospora Stewart & Grund *in* Can. J. Bot. 52:333. 1974.
In humus under *Picea* sp. (spruce) and *Pinus* sp. (pine). Kings Co. 27 Sept. 1966-H.L.S. (ACAD HS-95).

Amanita muscaria (L. ex Fr.) Hooker *in* Flora Scotica (Acotyledons part 2, pp. [3]-162). 1821.
Under conifers and mixed woods. General. 1880-J.S. (A.H.M.) (KM-159, 160, 528 *in* DAOM, K.A.H.) (L.E.W.-511, 524).

Amanita onusta (Howe) Sacc. *in* Syll. Fung. 9:1. 1891.
Agaricus onustus Howe.
From Kings and Lunenburg Co. 31 July 1967-H.L.S. (ACAD HS-214, 220, 271).

Amanita parcivolvata (Pk.) Gilbert *in* Bresadola, Icon. Mycol. 27(2):226. 1941.
Amanitopsis parcivolvata Pk.
From Kings Co. 10 Sept. 1931-K.A.H. (KM-168, 5132 *in* DAOM fide A.H.S.).

Amanita peckiana Kauff. apud Pk. *in* Mycologia 5:67. 1913.
Rare. In humus or sand under *Pinus strobus* L. (white pine) and *Tsuga canadensis* (L.) Carr. (hemlock). Kings Co. 31 July 1966-H.L.S. (ACAD HS-7, 222, 270).

Amanita porphyria (Alb. & Schw.) Fr. *in* Syst. Mycol. 1:14. 1821.
Amanita tomentella Kromb.
On humus under *Picea* sp. (spruce). Colchester and Kings Co. 27 July 1931-A.H.S., L.E.W. (W-705) (KM-821, 2537, 2538, 5317, 5377 *in* DAOM, K.A.H.).

Amanita rubescens (Pers. ex Fr.) S.F. Gray *in* Nat. Arr. Br. Pl. 1:600. 1821.
On grassy areas near woods, or in open coniferous or mixed woods. Annapolis, Colchester, Halifax, Kings and Pictou Co. 1913-A.H.M. (KM-162, 3925 *in* DAOM, K.A.H.) (L.E.W.-194, 542) (ACAD 10365).

Amanita solaniolens Steward & Grund *in* Can. J. Bot. 52:331. 1974.
In humus under *Acer* sp. (maple) and *Tsuga* sp. (hemlock). Kings Co. 26 July 1967-H.L.S. (ACAD HS-200, 215).

Amanita solitaria (Bull. per Fr.) Mérat *in* Nouv. Flore Envir. Paris, Ed. 4, 1:121. 1836.
Amanita strobiliformis (Vitt.) Quél.
On humus under conifers or mixed woods. Colchester, Kings and Pictou Co. 1908-A.H.M. (L.E.W.-797) (KM-164, 1725, 1828, 3928 *in* DAOM, K.A.H.).

Amanita strangulata (Fr.) Rose apud Karst. *in* Hattsvampar 1:7. 1879.
Amanita inaurata Secr.
Amanitopsis strangulata (Fr.) Roze.
Under *Picea* sp. (spruce) and *Tsuga* sp. (hemlock). Guysborough and Kings Co. 15 Apr. 1911-Thomas Langton (KM-169 as *Amanitopsis strangulata,* 1980, 2541 *in* DAOM, K.A.H.).

Amanita umbonata Pomerleau *in* Flore des Champignons au Québec:516-518. 1980.
Amanita caesarea (Fr.) Schw. var. *americana* Gilb.
On ground in woods. Antigonish, Colchester, Kings and Lunenburg Co. 1908-A.H.M. (KM-1983, 2530 *in* DAOM, K.A.H. as *A. caesarea* (Scop. ex Fr.) Grev.) (ACAD 10216, 11562, 11926, 13035).

Amanita vaginata (Bull. ex Fr.) Vitt. var. **vaginata** *in* Tentamen Mycol. seu Amanitarum Illust. Med. 1826.
Amanitopsis vaginata (Fr.) Roze.
Amanitopsis vaginata (Fr.) Roze var. *livida* Pk.
In coniferous, deciduous and mixed woods. General. 1880-J.S. (A.H.M.) (KM-170-172, 825, 1726, 1979, 2542 *in* DAOM, K.A.H.) (L.E.W.-562, 753) (ACAD 1088, 10327, 10944, 10990, 11779) See comments this species in Proc. N.S. Inst. Sci. 31:120. 1981.

Amanita vaginata (Bull. ex Fr.) Vitt. var. **alba** Gill. *in* Hymén. Fr.:50-51. 1874.
From Colchester and Kings Co. 1936-A.H.S., L.E.W. (KM-824, 3936 *in* DAOM, K.A.H.).

Amanita verna (Bull. ex Fr.) Pers. ex Vitt. *in* Tentamen Mycol. seu Amanitarum Illust. Med. 1826.
On humus under hardwoods. General. 1890-J.S. (A.H.M.) (KM-163, 822, 2543 *in* DAOM, K.A.H.) (L.E.W.-763).

Amanita virosa (Lam. ex Fr.) Gill. *in* Hymén Fr., tab. 6. 1874.
On humus under mixed woods. Colchester, Kings and Shelburne Co. 1908-A.H.M. (KM-161, 823, 1720, 3930, 5159 *in* DAOM, K.A.H.) (L.E.W.-763a).

Amanita wellsii Murr. *in* Mycologia 12:291. 1920.
Amanita wellsii (Murr.) Sacc.
From Kings and Victoria Co. 18 Aug. 1979-John Timpa (ACAD 13102, 13111, K.A.H. 20 Aug. 1979).

Amanitopsis vaginata (Fr.) Rose *in* Bull. Soc. Bot. Fr. 23. 1876 var. **fulva** Sacc. *in* Syll. Fung. 5:21. 1887.
Amanita fulva (Schaeff. ex Fr.) pers. (Singer, 1951).
On humus under *Acer* sp. (maple) and *Fagus* sp. (beech). Colchester Co. 20 July 1931-A.H.S., L.E.W. (W-685).

Amerosporium trichellum (Fr.) Lind. *in* Danish Fungi:471. 1913.
Collectotrichum trichellum (Fr.) Duke.
Vermucularia trichella Grev.
On *Hedera helix* L. (English ivy). Hants and Yarmouth Co. 31 July 1925-J.F.H.

★**Ampelomyces quisqualis** Ces. ex Schlecht. *in* Oesterr. Bot. Z. 10:301. 1852.
Cicinobolus cesatii de Bary.
Parasatizing *Sphaerotheca pannosa* (Wallr. ex Fr.) Lév. (powdery mildew) on *Rosa* sp. (rose). Digby Co. 5 Aug. 1958-K.A.H., C.O.G.

Amphisphaeria juniperi Tracy & Earle *in* Greene Pl. Baker. 1:30. 1901.
On weathered or rotten wood of *Abies* sp. (fir) or other conifers. Colchester Co. 21 June 1933-L.E.W. (W-1603, 1674).

Amylocorticium cebennense (Bourd) Pouz. *in* Česká Mykol. 13(1):11. 1959.
Corticium cebennense Bourd.
On coniferous wood. Colchester and Kings Co. 20 Aug. 1935-L.E.W. (W-1793 fide H.S.J.) (KM-2807 *in* DAOM coll. K.A.H. det Joan Hanson) (DAOM 31051, K.A.H.).

Amylocorticium subsulphureum (Karst.) Pouz. *in* Česká Mykol. 13(1):11. 1959.
Corticium subsulphureum Karst.
Peniophora subsulphurea (Karst.) Höhn. et Litsch.
On *Pinus strobus* L. (white pine). 1975-L.P.M., J.M.M.

Amylostereum chailletii (Pers. ex Fr.) Boid. *in* Rev. Mycol. 23(3):345. 1958.
Lloydellopsis chailletii (Pers. ex Fr.) Pouz.
Stereum chailletii (Pers. ex Fr.) Fr.
On *Abies balsamea* (L.) Mill. (balsam fir), *Picea rubens* Sarg. (red spruce) and *Tsuga canadensis* (L.) Carr. (hemlock). Kings Co. 1951-A.G.D. (Can. J. Bot. 35:857-874. 1957) (KM-2817 *in* DAOM, K.A.H.).

Anthostoma atro-punctatum (Schw.) Sacc. *in* Syll. Fung. 1:295. 1882.
See *Hypoxylon atropunctatum* (Schw. ex Fr.) Cke.

Anthostoma melanotes (Berk. & Br.) Sacc. *in* Michelia 1:326. 1879.
On decorticated wood of *Alnus* sp. (alder) and *Salix* (willow). Colchester Co. 1 Aug. 1931-L.E.W. (W-1210).

Antrodia heteromorpha (Fr. per Fr.) Donk *in* Persoonia 4:339. 1966.
Coriolellus heteromorphus (Fr.) Bond. & Sing. (1941).
Daedalea heteromorpha Fr.
Trametes heteromorpha (Fr.) Bres.
On *Abies balsamea* (L.) Mill. (balsam fir), *Picea glauca* (Moench) Voss (white spruce), *P. mariana* (Mill.) BSP. (black spruce), *Tsuga canadensis* (L.) Carr. (hemlock) and other species of *Picea* and *Tsuga*. Colchester, Kings and Queens Co. 1933-L.E.W. (W-1655) (KM-810, 997 *in* DAOM, K.A.H.) (O-F2613, 3183).

Antrodia serialis (Fr.) Donk *in* Persoonia 4:340. 1966.
Coriolellus serialis (Fr.) Murr.
Polyporus serialis Fr.
Trametes serialis Fr.
On *Picea* sp. (spruce), *Pinus* sp. (pine) and other coniferous wood. Cape Breton, Colchester, Halifax, Hants and Kings Co. 1950-L.E.W. (O-F4813) (KM-1368, 4193-4204 *in* DAOM, K.A.H.).

Antrodia sinuosa (Fr.) Karst. *in* Medd. Soc. Fauna Flora Fenn. 6:10. 1881.
Polyporus sinuosus (Fr.) Cke.
Poria sinuosa (Fr.) Cke.
On *Picea mariana* (Mill.) BSP. (black spruce). 1975-L.P.M., J.M.M.

Aphanomyces euteiches Drechsler *in* Jones & Drechsler, J. Agric. Res. 30:311. 1925.
On *Picea glauca* (Moench) Voss (white spruce). 1975-L.P.M., J.M.M.

Aphanomyces raphani Kendr. *in* Bull. Indiana Agric. Exp. Stn.:311. 1927.
On *Raphanus sativus* L. (radish). Kings Co. 18 June 1956-K.A.H.

Aphanomyces stellatus de Bary *in* Jahrb. Wiss. Bot. 2:178. 1860.
From Cape Breton Co. 1913-C.L.M.

Aphelaria tuberosa (Grev.) Corner *in* Monogr. of *Clavaria* and Allied Genera:192. 1950.
Lachnocladium semivestitum Berk & Br.
From Kings Co. 5 Sept. 1938-K.A.H. (KM-1644 *in* DAOM, as *L. semivestitum*).

Apiocrea chrysosperma (Tul.) Syd. *in* Ann. Mycol. 18:186. 1920.
Stat. conid. *Sepedonium mycophilum* (Pers.) Nees.
On *Boletus* sp. (fungus), stems of *Fragaria* sp. (cultivated strawberry) and *Medicago sativa* L. (alfalfa). Kings Co. 28 Aug. 1953-K.A.H. (KM-4623, 4625 *in* DAOM).

Apiognomonia errabunda (Rob.) Höhn. *in* Ann. Mycol. 16:51. 1918.
Gnomonia errabunda (Rob.) Auersw.
Gnomonia platani Kleb.
Gnomonia veneta (Sace. & Speg.) Kleb. (non Speg.)
Stat. conid. *Discula umbrinella* (Berk. & Br.) Sutton.
On *Fagus grandifolia* Ehrh. (beech), *Fraxinus americana* L. (white ash), *F. nigra* Marsh. (black ash), *Quercus rubra* L. (red oak), *Tilia cordata* Mill. (small-leaved

linden) and *T. europea* L. (linden, basswood). Halifax and Kings Co. 3 July 1926-J.F.H.

Apiognomonia guttulata (Starb.) Wehm, *in* Can. J. Res., C, 20:585. 1942.
Gnomoniella guttulata Starb.
On *Agrimonia* sp. Colchester Co. 7 Sept. 1929-L.E.W. (W-291, 1538).

Apioporthe anomala (Pk.) Höhn *in* Sitzungsber. K. Akad. Wiss. Math.-Naturwiss. Kl. 126:381. 1917.
On *Corylus americana* Walt. (hazelnut). Colchester Co. 23 Sept. 1891-G.H.H. (Univ. Mich. Herb.) (L.E.W.-371).

Apioporthe corni Wehm. *in* The Genus *Diaporthe* Nitschke and its Segregates. Univ. Mich. Stud. Sci., Ser. 9:220. 1933.
Stat. conid. *Zythia aurantiaca* (Pk.) Sacc.
On *Cornus alternifolia* L. (alternate-leaved dogwood). Colchester Co. June 1935-L.E.W. (W-1711).

Apioporthe phomaspora (Cke. & Ell.) Wehm. *in* The Genus *Diaporthe* Nitschke and its Segregates. Univ. Mich. Stud. Sci., Ser. 9:222. 1933.
On *Myrica pensylvanica* Loisel. (bayberry). Kings Co. 26 June 1926-L.E.W. (P369).

Apioporthe vepris (de Lacr.) Wehm. *in* The Genus *Diaporthe* Nitschke and its Segregates. Univ. Mich. Stud. Sci., Ser. 9:221. 1933.
On stems of *Rubus* sp. (raspberries, blackberries). Colchester Co. 23 June 1926-L.E.W. (P148b) (7 Apr. 1970-C.O.G., DAOM 138594, 138595).

Apiosporina collinsii (Schw.) Höhn. *in* Sitzungsber. K. Akad. Wiss. Math.-Naturwiss. Kl. 119(1):439. 1910.
On *Amelanchier intermedia* Spach (shadbush) and *A. wiegandii* Nielson (wild pear or shadbush). Annapolis and Kings Co. 1913-A.H.M. (L.E.W.-1725) (DAOM 887).

Apiosporina morbosa (Schw.) v. Arx *in* Acta Bot. Neerl. 3:86. 1954.
Dibotryon morbosum (Schw.) Theiss. & Syd.
Black knot on *Prunus cerasus* L. (cultivated sour cherry), *P. domestica* L. (plum), *P. pensylvanica* L.f. (pin cherry), *P. persica* (L.) Batsch (peach), *P. virginiana* L. (choke cherry) and *Prunus* spp. General. 1908-A.H.M. (DAOM 3786).

Aporpium caryae (Schw.) Teixeira & Rogers *in* Mycologia 47:410. 1955.
Polyporus caryae Schw.
On *Betula lutea* Mickx. f. (yellow birch) and *Populus* sp. (poplar, aspen). Kings and Victoria Co. 27 July 1950-V.J.N. (KM-1850 *in* DAOM, K.A.H.) (DAOM 31250, 31262) (WS-286 *in* ACAD).

★**Aposphaeria compressa** Pass. *in* Diagn. F.N. I-V (96). 1887-1891.
On bark of *Prunus persica* (L.) Batsch (peach). Annapolis Co. 13 June 1973-C.O.G., M.P.C. (DAOM 145547).

Apostemium fiscellum (Karst.) *in* Not. Sällsk. Fauna Flora Fenn. 10:104. 1869.
Apostemidium fiscellum Karst. (1870).
On submerged sticks in cold water. Colchester Co. 19 Aug. 1933-L.E.W. (W-1638).

Apostemium vibrisseoides (Pk.) Boud. *in* Ann. Mycol. 4:240. 1906 (as *Apostemidium*).
Helotium vibrisseoides Pk.
On twigs and logs in brook. Kings Co. 6 July 1933-K.A.H. (KM-1001-1003, 1068 *in* DAOM).

Arachnopeziza aurelia (Pers.) Fckl. *in* Jahrb. Nass. Vereins Natur. 23-24:303. 1870.
On bark of *Acer* sp. (maple). Kings Co. 10 May 1946-J.F.H. (KM-2206 *in* DAOM det. K.A.H.).

Arcyria cinerea (Bull.) Pers. *in* Syn. Fung.:184. 1801.
On decayed wood. Colchester and Pictou Co. 1906-C.L.M. (L.E.W.-1084).

Arcyria denudata (L.) Wettst. *in* Verh. Zool.-Bot. Ges. Wien 35:Abh.535. 1886.
On decayed wood. Colchester and Pictou Co. 1906-C.L.M. (L.E.W.-1089).

Arcyria ferruginea Sauter *in* Flora 24:316. 1841.
On old wood of *Populus* sp. (poplar). Pictou Co. 1906-C.L.M.

Arcyria incarnata (Pers.) Pers. *in* Obs. Mycol. 1:58. 1796.
On decayed wood of *Fagus* sp. (beech) and *Populus* sp. (poplar). Colchester and Pictou Co. 1906-C.L.M. (L.E.W.-413, 1141, 1400).

Arcyria nutans (Bull.) Grev. *in* Flora Edinb. 455. 1824.
On decayed logs. Colchester and Pictou Co. 1906-C.L.M. (L.E.W.-1079, 1140).

Arcyria pomiformis (Leers) Rostaf. *in* Monogr. Mycetozoa:271. 1875.
On cow dung. Inverness Co. 4 Sept. 1927-L.E.W. (W-1693).

Arcyria stipata (Schw.) List. *in* Monogr. Mycetozoa:189. 1894.
Hemitrichia stipata (Schw.) Macbr.
On decaying wood of *Populus grandidentata* Michx. (large-toothed aspen). Pictou Co. 1906-C:L.M.

★**Armillaria decorosa** (Pk.) Sing. *in* Mycologia 35(2):152. 1943.
Tricholoma decorosum Pk. (1873).
In wooded ravine. Kings Co. 3 Nov. 1953-K.A.H. (KM-2741 *in* DAOM).

★**Armillaria focalis** (Fr.) Sacc. *in* Syll. Fung. 5:74. 1887.
From Annapolis, Kings and Lunenburg Co. 6 Oct. 1952-K.A.H. (KM-2547-2550, 5380 *in* DAOM).

Armillaria ponderosa Pk. *in* Annu. Rep. N.Y. State Mus. 26:50. 1874.
Armillaria ponderosa (Pk.) Sacc. (1887).
Tricholoma ponderosa Pk.
Tricholoma ponderosum (Pk.) Sing.
Under conifers. Annapolis and Kings Co. 1913-A.H.M. (KM-173, 1434, 2551, 5382 *in* DAOM, K.A.H.).

Armillaria viscidipes Pk. *in* Bull. N.Y. State Mus. 44:15. 1891.
Under *Betula* sp. (birch) and *Picea* sp. (spruce). Colchester and Lunenburg Co. 1913-A.H.M. (L.E.W.-699).

Armillariella mellea (Vahl. in Flora Dan. ex Fr.) Karst. *in* Hymen. Fenn. 2:4. 1881.
Armillaria mellea (Vahl. ex Fr.) Quél.
Armillaria mellea (Vahl. ex Fr.) Kummer.
Common on dead wood and at base of decaying stumps. General. 1886-J.S. (A.H.M.) (KM-175, 176, 4162, 5381 *in* DAOM, K.A.H.) (L.E.W.-868).

Arthrinium phaeospermum (Cda.) M.B. Ellis *in* Commonw. Mycol. Inst. Mycol. Pap. 103:8. 1965.
On *Fragaria* sp. (cultivated strawberry), *Malus pumila* Mill. (apple), *Prunus cerasus* L. (cultivated sour cherry), *Solanum tuberosum* L. (potato), *Vaccinium macrocarpon* Ait. (cranberry) and *Vitis vinifera* L. (grape). Annapolis, Inverness and Kings Co. 18 Sept. 1964-C.O.G.

Arthrinium state of *Apiospora montagnei* Sacc. *in* Nuovo G. Bot. Ital. 7:306. 1875.
From leaves of *Vaccinium macrocarpon* Ait. (cranberry). Kings Co. 7 Oct. 1976-C.O.G. (DAOM 161168).

Arthrobotrys conoides Drechsler *in* Mycologia 29:476. 1937.
From crown of *Fragaria* sp. (cultivated strawberry). Kings Co. 15 Mar. 1962-C.O.G.

Arthrobotrys dactyloides Drechsler *in* Mycologia 29:481. 1937.
In association with nematodes from compost and dung (cow, horse, sheep). Kings Co. May 1980-M.E.A.

Arthrobotrys musiformis Drechsler *in* Mycologia 29:481. 1937.
Candelabrella musiformis Rifai & Cke.
In association with nematodes from compost and dug (hog, rabbit). Kings Co. 1980-M.E.A.

Arthrobotrys oligospora Fres. *in* Beitr. Mykol. 3, figs. 1:7. 1863.
From crown of *Fragaria* sp. (cultivated strawberry) and in association with nematodes from compost, dung (cow, sheep, horse, chicken, hog), ensilage and wood chips. Kings Co. May 1963-C.O.G. (M.E.A. nematode destroying fungus, Thesis, Acadia Univ. 1980).

Arthrobotrys superba Cda. *in* Pracht-Fl. Europaelscher Schimmelhildunger 43, tab. 21. 1839.
In association with nematodes from dung (horse) and rotting stump. Kings Co. May 1980-M.E.A.

Arthrosporium compositum Ell. *in* Bull. Torrey Bot. Club 8:64. 1881.
In wooded ravine. Kings Co. 18 Nov. 1953-K.A.H. (KM-2848 *in* DAOM det. S.J.H.).

Ascobulus stercorarius (Bull.) Schroet. *in* Cohn, Krypt. Fl. Schles. 3(2):56. 1893, emend Olive, Mycologia 46:105. 1954.
On cow dung. Kings Co. 30 Aug. 1936-K.A.H. (KM-1116, 1133 *in* DAOM).

Ascocalyx abietis Naumov *in* Bolez. Rast. 14:138. 1925.
Stat. conid. *Bothrodiscus pinicola* Shear.
On *Abies balsamea* (L.) Mill. (balsam fir). Colchester Co. 7 July 1931-L.E.W. (W-416, 1524 det. J.W.G.).

★**Ascochyta avenae** (Petrak) Sprague & Johnson *in* Mycologia 40:297. 1948.
On leaves of *Avena sativa* L. (oat). Kings Co. 6 July 1970-C.O.G.

Ascochyta cassandrae Pk. *in* Annu. Rep. N.Y. State Mus. 38:94. 1885.
On leaves of *Chamaedaphne calyculata* (L.) Moench var. *angustifolia* (Ait.) Rehd. (leatherleaf). Kings and Shelburne Co. 19 Aug. 1964-J.F.H., D.W.C.

Ascochyta compositarum Davis *in* Trans. Wis. Acad. Sci. Arts Lett. 19:700. 1919.
On leaves of *Aster cordifolius* L. (heart-leaved aster). Kings Co. 4 Oct. 1951-D.W.C.

Ascochyta equiseti Grove *in* J. Bot.:315. 1918.
Phoma equiseti Desm.
On *Equisetum arvense* L. (field horsetail). Kings Co. 21 July 1943-R.M.L. (as *P. equiseti* fide D.B.O.S.).

Ascochyta fabae Speg. *in* Fung. Arg. Novi Crit.:321. 1899.
On *Vicia faba* L. var. *minor* (Peterm.) Beck. (tickbean). Annapolis and Kings Co. 14 Jan. 1971-C.O.G., R.W.D. (DAOM 142288, 142290).

Ascochyta imperfecta Pk. *in* Bull. N.Y. State Mus. 157:21. 1912.
See *Phoma medicaginis* Malbr. & Roum.

★**Ascochyta philadelphi** Sacc. & Speg. *in* Michelia 1:165. 1878.
Leaf spot on *Philadelphus coronarius* L. (mock-orange). Lunenburg Co. 20 July 1980-N.L.N.

Ascochyta pinodella L.K. Jones *in* Bull. N.Y. State Agric. Exp. Stn.:547. 1927.
See *Phoma medicaginis* var. *pinodella* (L.K. Jones) Boerema.

Ascochyta pisi Lib. *in* Pl. Crypt. Ard., fasc. 1:59. 1830.
On *Lathyrus odoratus* L. (sweet pea) and *Pisum sativum* L. (pea). General. June 1932-J.F.H., K.A.H.

Ascochyta rhei (Ell. & Ev.) Ell. & Ev. *in* Proc. Acad. Nat. Sci. Phila. 45:160. 1893.
Leaf spot of *Rheum rhaponticum* L. (rhubarb). General. 2 Aug. 1933-K.A.H.

★**Ascochyta syringae** Bres. *in* Hedwigia 33:207. 1894.
On *Syringa vulgaris* L. (common lilac). Shelburne Co. 26 June 1973-C.O.G.

★**Ascochyta trifolii** Bond. & Truss. *in* Bolez. Rast. 7:215. 1913.
On leaves of *Trifolium pratense* L. (red clover). Annapolis Co. 13 June 1973-C.O.G., J.A.P. (DAOM 145391).

Ascochyta wisconsina Davis *in* Trans Wis. Acad. Sci. Arts Lett. 18:101. 1915.
On leaves of *Sambucus canadensis* L. (common elder). Kings Co. 5 Oct. 1951-D.W.C.

★**Ascocoryne cylichnium** (Tul.) Korf *in* Phytologia 21(4):202. 1971.
Stat. conid. *Coryne urnalis* (Nyl.) Sacc. fide Dennis, Commonw. Mycol. Inst. Mycol. Pap. 62:172. 1956.
On rotten wood. Kings Co. 5 Nov. 1952-K.A.H. [KM-1572 *in* DAOM (11609)].

★**Ascocoryne sarcoides** ([Jacq.] Gray) Groves & Wilson *in* Taxon 16:140. 1967.
Stat. conid. *Coryne dubia* (Pers.) S.F. Gray.
On *Fagus grandifolia* Ehrh. (beech). Kings Co. 20 Oct. 1938-K.A.H. (KM-1254 *in* DAOM).

Ascophanus carneus (Pers.) Boud. *in* Ann. Sci. Nat. Bot., Sér. 5, 10:250. 1869.
On bear and moose dung. Colchester and Hants Co. 24 July 1931-L.E.W. (W-1498) (KM-1117 *in* DAOM, K.A.H.)

Ascophanus granulatus (Bull.) Speg. var. **granulatus** *in* Michelia 1:235. 1879.
See *Coprobia granulata* (Bull. ex. Fr.) Boudier.

Ascophanus granulatus (Bull.) Speg. var. **cervorum** Rehm in Ascomyceten: *in* Rabenhorst, Kryptogamenfl. 1(3):943. 1896.
See *Coprobia granulata* (Bull. ex. Fr.) Boud.

★**Ascosphaera apis** (Maassen ex Claussen) Olive & Spiltoir *in* Mycologia 47:242. 1955.
Pericystis apis Maassen ex Claussen.
Chalkbrood disease of honey bees. Colchester and Cumberland Co. 26 Aug. 1979-Lorne Crozier and E.A. Karmo, N.S. Dep. Agric. & Marketing.

Ascospora ruborum (Oud.) Zeller *in* Mycologia 17:39. 1925.
Cane blight of *Rubus idaeus* L. (red raspberry). Digby and Kings Co. 25 June 1929-J.F.H.

★**Aspergillus candidus** Link *in* Observationes 1:16. 1809.
From milled peat, *Sphagnum* sp. Kings Co. 1961-C.O.G.

Aspergillus chevalieri (Mang.) Thom & Church *in* The Aspergilli:111-112. 1926.
From soil. Cumberland Co. 1980-D.B., A.T.

Aspergillus chevalieri (Mang.) Thom & Church var. **intermedius** Thom & Raper *in* U.S. Dep. Agric. Misc. Publ. No. 426:21. 1941.
Isolated from soil. Cumberland Co. 1971-D.B. et al.

Aspergillus flavus Link *in* Observationes 1:16. 1809.
On wood of *Malus pumila* Mill. (apple) and leaf of *Solanum tuberosum* L. (potato). Kings Co. May 1963-C.O.G.

★**Aspergillus fumigatus** Fres. *in* Beitr. Mykol.:81. 1863.
On *Lycopersicon esculentum* Mill. (tomato), *Rubus idaeus* L. (red raspberry) and from milled peat, *Sphagnum* sp. Kings Co. 1961-C.O.G.

Aspergillus glaucus Link *in* Observationes 1:16. 1809.
On decayed organic material and from peat soil. Kings Co. and others. 1908-A.H.M.

★**Aspergillus niger** v. Tiegh. *in* Ann. Sci. Nat. Bot., Sér. 5, 8:240. 1867.
On *Fragaria* sp. (cultivated strawberry), *Lycopersicon esculentum* Mill. (tomato) and from milled peat, *Sphagnum* sp. Kings Co. 1961-C.O.G.

★**Aspergillus ochraceus** Wilhelm *in* Inaugural Dissertation, Strassburg:66. 1877.
On *Cucurbita maxima* Duchesne (squash), *Malus pumila* Mill. (apple) and from milled peat, *Sphagnum* sp. Kings Co. 1961-C.O.G.

★**Aspergillus repens** de Bary *in* Abh. Senckenb. Naturforsch. Ges. 7:379. 1870.
On moldy hay of *Trifolium pratense* L. var. *sativum* (Mill.) Schreb. (red clover). Digby Co. Jan. 1964-C.O.G.

★**Aspergillus sydowi** (Bain. & Sart.) Thom & Church *in* The Aspergilli:147. 1926.
On wood of *Prunus cerasus* L. (sour cherry) and mouldy hay of *Trifolium pratense* L. var. *sativum* (Mill.) Schreb. (red clover). Digby and Kings Co. Jan. 1964-C.O.G.

★**Aspergillus versicolor** (Vuill.) Tirab. *in* Thom & Church, The Aspergilli:142-144. 1926.
On *Malus pumila* Mill. (apple), *Solanum tuberosum* L. (potato) and from milled peat, *Sphagnum* sp. Kings Co. 1961-C.O.G.

Asterina conglobata Berk. & Curt. *in* Grevillea 4:9. 1875.
Dimerosporium conglobatum (Berk. & Curt.) Ell. & Ev.
On leaves of *Arctostaphylos uva-ursi* (L.) Spreng. (common bearberry). Kings Co. 26 June 1939-J.W.M.

Asteroma ulmeum (Miles) Sutton *in* The Coelomycetes:499. 1980.
Cylindrosporella ulmea (Miles) v. Arx.
Gloeosporium ulmeum Miles.
See stat. perf. *Gnomonia ulmea* (Schw.) Thüm.

Asterophora lycoperdoides (Bull. ex Mérat) S.F. Gray *in* Nat. Arr. Br. Pl. 1:635. 1821.
Nyctalis asterophora Fr.
Parasitic on caps of *Russula* sp. and *Lactarius* sp. Annapolis, Colchester and Kings Co. 1928-K.A.H. (KM-407, 1885 *in* DAOM) (L.E.W.-700).

Asterophora parasitica (Bull. ex Fr.) Sing *in* Lilloa 22:171. 1951.
Nyctalis parasitica (Bull.) Fr.
On decayed and blackened remains of *Russula* fruit bodies. Colchester and Hants Co. 1928-K.A.H. (KM-408, 1596 *in* DAOM) (L.E.W.-727, 727a).

Asterosporium asterospermum Pers. ex S.F. Gray) Hughes in Can. J. Bot. 36:738. 1958.
Asterosporium hoffmanni Kunze. ex Wallr.
On *Fagus grandifolia* Ehrh. (beech). Colchester Co. July 1935-L.E.W. (W-1742).

Asterosporium betulinum Pk. *in* Annu. Rep. N.Y. State Mus. 33:26. 1880.
On twigs of *Betula lutea* Michx. f. (yellow birch). 1980-Sutton [IMI. 32284 (32285)]. (The Coelomycetes:135. 1980).

Asterostroma andinum Pat. *in* Bull. Soc. Mycol. Fr. 9:133. 1893.
Asterostroma bicolor Ell. & Ev.
Asterostroma gracile Burt.
Asterostroma spiniferum Burt.
On deciduous wood. Kings Co. 22 Oct. 1953-K.A.H. (KM-2811 *in* DAOM, det. Joan Hanson).

Asterostroma cervicola (Berk & Curt.) Massee *in* Linn. Soc. Bot. J. 25:155. 1889.
On *Abies balsamea* (L.) Mill. (balsam fir). Colchester and Halifax Co. 1950-L.E.W. det. H.S.J. (KM-4285 *in* DAOM, K.A.H. det. L.K.W.).

Astraeus hygrometricus (Pers.) Morg. *in* J. Cinc. Soc. Nat. Hist. 12:20. 1889.
Geaster hygrometricus Pers.
From Pictou Co. 1908-A.H.M.

Athelia decipiens (Höhn. & Litsch.) Erikss. *in* Eriksson & Ryuarden, The Corticiaceae of Northern Europe 2:111. 1973.
On *Picea* sp. (spruce) and *Thuja occidentalis* L. (white cedar). 1975-L.P.M., J.M.M.

Athelia fuscostrata (Burt) Donk *in* Fungus 27:12. 1957.
On *Picea* sp. (spruce). 1975-L.P.M., J.M.M.

Atropellis tingens Lohm. & Cash. *in* J. Wash. Acad. Sci. 30:257. 1940.
On *Pinus strobus* L. (white pine). 1959. (For. Insect Dis. Surv. 34. 1959).

Aureobasidium pullulans (de Bary) Arn. *in* Les Asterinées (in Ann. Ec. Nat. Agric. Montpellier, N.S. 16:39. 1918 (footnote).
From *Pinus sylvestris* L. (Scots pine), milled peat, *Sphagnum* sp., fruit of *Vaccinium macrocarpon* Ait. (cranberry) and *V. vitis-idaea* L. var. *Minus* Lodd. (foxberry). Cumberland and Kings Co. 1950-L.E.W.

Auricularia auricula (Hook.) Underw. *in* Barrett, Mycologia 2:12. 1910.
Auricularia auricula-judae (Fr.) Schroet.
Auricularia auricularis (S.F.Gray) Martin.
On *Abies balsamea* (L.) Mill. (balsam fir). Colchester, Halifax, Kings and Pictou Co. 1888-J.S. (KM-93, 949, 5276, 5277 *in* DAOM, K.A.H.).

Auriscalpium vulgare S.F. Gray *in* Nat. Arr. Br. Pl. 1:650. 1821.
Auriscalpium auriscalpium (L. ex Fr.) Banker.
Hydnum auriscalpium Fr.
On cones of *Pinus banksiana* Lamb. (jack pine) and *P. sylvestris* L. (Scots pine). Cumberland and Kings Co. 1 Sept. 1959-K.A.H. (KM-4361, 4738, 4739 *in* DAOM) (ACAD 14062, on corn cob, 26 Oct. 1981).

Austroboletus gracilis (Pk.) Wolfe var. **gracilis** *in* Bibl. Mycol. 69:71. 1979.
Boletus gracilis Pk.
Tylopilus gracilis (Pk.) Henn.
In conifer woods under *Tsuga canadensis* (L.) Carr. (hemlock). Guysborough and Kings Co. 14 Sept. 1958-K.A.H. (DAOM 112489, 112540).

Austroboletus gracilis (Pk.) Wolfe var. **laevipes** (Pk.) Wolfe *in* Bibl. Mycol. 69:73. 1979.
Boletus gracilis Pk. var. *laevipes* Pk. (basionym).
Reported from Digby, Inverness, Kings and Richmond Co. 1 Sept. 1952-K.A.H. (DAOM 71891 coll. J.W.G., 111662, 113545 coll. K.A.H.) (ACAD 13856).

Baeospora myriadophylla (Pk.) Sing. *in* Rev. Mycol. 3:193. 1938.
Collybia myriadophylla (Pk.) Sacc.
On moss covered log and other debris. Colchester and Kings Co. 21 Aug. 1931-A.H.S., L.E.W. (W-804) (KM 239, 862 *in* DAOM, K.A.H.).

Balansia hypoxylon (Pk.) Atk. *in* J. Mycol. 11:252. 1905.
On *Danthonia spicata* (L.) Beauv. (wire grass). Kings, Lunenburg and Pictou Co. 9 July 1949-J.F.H. (DAOM 7528).

Bankera fuligineo-alba (Schmidt ex Fr.) Pouz. *in* Ceská. Mykol. 9:96. 1955.
On mats of needles of *Pinus resinosa* Ait. (red pine). Annapolis and Kings Co. 9 Oct. 1953-K.A.H. (KM-2295-2298, 3134-3137, 3443-3446, 4746, 4904 in DAOM).

Bankera violascens (Alb. & Schw. ex Fr.) Pouz. *in* Česká Mykol. 9:96. 1955.
Bankera carnosa (Banker) Snell, Dick & Taussig.
In coniferous and mixed woods. Annapolis, Cape Breton, Colchester, Hants and Kings Co. 1 Oct. 1953-K.A.H. (KM-2299-2302, 4363-4375, 4742-4745 and others in DAOM).

Basidiophora entospora Roze & Cornu *in* Ann. Sci. Nat. Bot., Sér. 5, 2:84. 1869.
On *Aster novae-angliae* L. (New England aster). Hants Co. 1952-A.E.R., D.W.C.

Basidioradulum radula ([Fr.] Fr.) Nobles *in* Mycologia 59:192. 1967.
Hydnum radula (Fr.) Fr.
Radulum orbiculare (Fr.) Grev.
On *Acer* sp. (maple). Kings Co. 31 May 1932-K.A.H. (ACAD 85).

Belonidium pruinosum (Jerd.) Rehm *in* Rabenhorst, Kryptogamenfl., Pilze, Discom. 4:562. 1889.
On stromata of *Hypoxylon* sp. on *Fagus* sp. (beech). Colchester Co. 26 June 1935-L.E.W. (W-1702).

Bertia moriformis (Tode) de Not. *in* G. Bot. Ital. 1:322. 1844.
On decorticated wood of *Acer spicatum* Lam. (mountain maple). Colchester Co. 11 July 1931-L.E.W. (W-495, 1152).

Bifusella linearis (Pk.) Höhn. *in* Ann. Mycol. 15:318. 1917.
On *Pinus strobus* L. (white pine). Hants Co. 1950-L.E.W. (coll. J.F.H., det. J.D.).

Bipolaris sorokiniana (Sacc. in Sorok.) Shoem. *in* Can. J. Bot. 37:884. 1959.
Drechsler sorokiniana Subram. & Jain.
Helminthosporium sorokinianum Sacc. in Sorok.
Helminthosporium sativum Pamm., King & Bakke.
Stat. perf. *Cochliobolus sativus* (Ito & Kurib.) Drechsler ex Dastur.
On *Hordeum vulgare* L. (barley), *Phaseolus vulgaris* L. (bean), *Secale cereale* L. (rye), *Triticum aestivum,* L. (wheat), *Vaccinium macrocarpon* Ait. (cranberry) and *Zea mays* L. (corn). General. 1950-L.E.W. (DAOM 117217, 160706, C.O.G., R.A.S.).

Bipolaris victoriae (Meehan & Murphy) Shoem. *in* Can. J. Bot. 37:882. 1959.
Drechsler victoriae (Meehan & Murphy) Subram.
Helminthosporium victoriae Meehan & Murphy.
Stat. perf. *Cochliobolus victoriae* Nelson.
On *Avena sativa* L. (oat). 1947-I.L.C., D.B.O.S. (Can. Plant Dis. Surv. 27:8. 1947).

Bisporella citrina (Batsch ex Fr.) Korf & Carp. *in* Mycotaxon 1(1):58. 1974.
Calcella citrina (Hedw. ex Purton) Quél.
Helotium citrinum (Hedw. ex Purton) Fr.
Peziza citrina Batsch ex Fr.
On *Alnus* sp. (alder). Colchester and Pictou Co. 1908-A.H.M. (L.E.W.-308).

Bisporella pallescens (Pers. ex Gray) Carp. & Korf *in* Mycotaxon 1(1):58. 1974.
Helotium pallescens (Pers. ex Gray) Fr.
On *Abies balsamea* (L.) Mill. (balsam fir). Kings Co. 26 Aug. 1933-K.A.H. (KM-1152 *in* DAOM).

Bjerkandera adusta (Willd. ex Fr.) Karst. *in* Medd. Soc. Fauna Flora Fenn. 5:38. 1879.
Polyporus adustus (Willd.) Fr.
On *Acer.* sp. (maple), *Betula lutea* Michx. f. (yellow birch), *Populus* sp. (poplar) and *Salix* sp. (willow). Annapolis, Colchester and Kings Co. 1908-A.H.M. (L.E.W.-1163) (A.R.P.-88) (KM-17a, 27, 29, 801, 1240, 4271 *in* DAOM, K.A.H.) (O-F2199, 2209, 2210) (ACAD 1300, 6548, 6559).

Bjerkandera fumosa (Pers. per Fr.) Karst. *in* Medd. Soc. Fauna Flora Fenn. 5:38. 1879.
Polyorus fumosus (Pers.) Fr.
Polyporus salignus Fr.
On *Populus* sp. (poplar) and *Salix* sp. (willow). Halifax and Kings Co. 1881-J.S. (ACAD 12398 coll. W.P.S., det. K.A.H.).

Bolbitius vitellinus (Pers. ex. Fr.) Fr. *in* Epicr. Syst. Mycol.:254. 1838.
Bolbitius fragilis (L. ex Fr.) Fr.
On cow dung. Halifax and Kings Co. 1881-J.S. (KM-5379 *in* DAOM, K.A.H.).

Boletellus chrysenteroides (Snell) Snell *in* Mycologia 33:422. 1941.
Boletus chrysenteroides Snell.
On rotten wood in conifer forest. Kings Co. 1976-D.W.G., K.A.H. (ACAD 10480).

Boletellus russellii (Frost) Gilbert *in* Les Bolets de Paris:107. 1931.
Boletus russellii Frost.
In dense coniferous forest under *Tsuga canadensis* (L.) Carr. (hemlock). Annapolis and Kings Co. 1 Sept. 1951-K.A.H. (KM-1456, 5464 *in* DAOM) (ACAD 5464, D.W.G., K.A.H.).

Boletinellus merulioides (Schw.) Murr. *in* Mycologia 1:7. 1909.
Boletinus merulioides (Schw.) Coker & Beers.
Gyrodon merulioides (Schw.) Sing.
Under *Fraxinus* sp. (ash) and on lawns or grassy areas. Annapolis, Kings and Pictou Co. 1913-A.H.M. (KM-593, 2992, 3724 *in* DAOM, K.A.H.).

Boletopsis grisea (Pk.) Bond. & Sing. *in* Ann. Mycol. 39:47. 1941.
Polyporus griseus Pk.
Polyporus subsquamosus Fr.
Boletopsis subsquamosa (L. ex Fr.) Kotl. & Pouz.
On *Picea* sp. (spruce) and *Pinus* sp. (pine). Hants and Kings Co. 12 Oct. 1952-K.A.H. (KM-1843, 2494, 3109, 3110, 5124, 5253 *in* DAOM).

Boletopsis leucomeleana (Pers. per Pers.) Fayod *in* Malpighia 3:72. 1889.
Under *Pinus resinosa* Ait. (red pine). Annapolis Co. 27 Sept. 1938-R.J.B. (ACAD 806).

Boletus affinis Pk. var. **affinis** *in* Annu. Rep. N.Y. State Mus. 25:81. 1873.
Boletus affinis *Pk.*
Suillus affinis (Pk.) Kuntze.
Xanthoconium affine (Pk.) Sing. (1947).
In mixed woods. Cumberland, Halifax and Kings Co. 1913-A.H.M. (ACAD 10296, D.W.G., K.A.H.) (KM-2967, 3740, 5330 *in* DAOM, K.A.H.).

Boletus affinis Pk. var. **maculosus** Pk. *in* Annu. Rep. N.Y. State Mus. 32:57. 1879.
In mixed conifer woods. Cumberland and Kings Co. 12 Aug. 1954-K.A.H. (KM-2968, 5329 *in* DAOM) (ACAD 10319, D.W.G., K.A.H.).

Boletus badius Fr. var. **badius** *in* Elench. Fung.:126. 1828.
Xerocomus badius (Fr.)
Kühner ex Gilbert.
Usually on old stumps in mixed woods. Colchester, Cumberland, Halifax, Kings and Pictou Co. 1881-J.S. (A.H.M.) (ACAD 11178, D.W.G., K.A.H.) (KM-1460, 5332 *in* DAOM, K.A.H.) (L.E.W.-672, 672a).

Boletus badius Fr. var. **glaber** Grund & Harrison *in* Nova Scotian Boletes: 116. 1976.
On rotten stumps in mixed woods. Kings Co. 1976-D.W.G., K.A.H. (ACAD 10453, 3757).

Boletus badius Fr. var. **macrostipitatus** Grund & Harrison *in* Can. J. Bot. 53:1420. 1975.
By rotten coniferous stumps. Inverness and Kings Co. 1975-K.A.H., D.W.G. (ACAD 11179, 11501).

Boletus bicolor Pk. var. **bicolor** *in* Annu. Rep. N.Y. State Mus. 24:78. 1872.
Boletus rubellus Krombh. ssp. *bicolor* (Pk.) Sing.
Under *Quercus* sp. (oak). Kings Co. 31 July 1938-K.A.H. (KM-727, 728, 3760-3763, 5334, 5335 *in* DAOM) (ACAD 10344, 10473, D.W.G., K.A.H.).

Boletus bicolor Pk. var. **subreticulatus** Smith & Thiers *in* Boletes of Mich.:278. 1971.
Usually in grassy areas near *Quercus* sp. (oak). Kings Co. 1976-D.W.G., K.A.H. (ACAD 10476, 10435).

Boletus caespitosus Pk. *in* Bull. Torrey Bot. Club. 27:17. 1900.
Under hardwoods. Colchester Co. 1976-D.W.G., K.A.H. (Snell 2526).

Boletus chrysenteron Fr. var. **chrysenteron** *in* Epicr. Syst. Mycol.:415. 1838.
Xerocomus chrysenteron (Fr.) Quél.
Under *Quercus* sp. (oak). Annapolis, Kings and Pictou Co. 1908-A.H.M. (KM-725, 729, 730, 2975, 3738, 5143, 5340, 5341 *in* DAOM, K.A.H.) (ACAD 10343, D.W.G., K.A.H.).

Boletus dartmouthi MacKay *in* Proc. & Trans. N.S. Inst. Sci. 11:134. 1908.
From Halifax Co. 1908-A.H.M. (see Murrill *in* North Am. Flora, Fungi IX, p. 151, and Wehmeyer *in* N.R.C. publ. No. 1890:78. 1950).

Boletus edulis Bull. ex Fr. var. **edulis** *in* Syst. Mycol. 1:392. 1821.
Leccinum edule (Fr.) S.F. Gray.
Under conifers and on grassy areas. Colchester, Kings and Lunenburg Co. 1913-A.H.M. (KM-556 *in* DAOM, K.A.H.) (L.E.W.-519) (ACAD 10291, 11207, D.W.G., K.A.H.).

Boletus edulis Bull. ex Fr. subsp. **aurantio-ruber** Dick & Snell *in* Mycologia 57:454. 1965.
Under *Pinus banksiana* Lamb. (jack pine), *P. resinosa* Ait. (red pine), *P. strobus* L. (white pine) and *Tsuga canadensis* (L.) Carr. (hemlock). 1965. (Type in W.H. Snell Bolete Herbarium no. 2533).

Boletus edulis Bull. ex Fr. var. **clavipes** Pk. *in* Annu. Rep. N.Y. State Mus. 51:309. 1899.
In wooded ravine. Annapolis and Kings Co. 1908-A.H.M. (KM-2017 *in* DAOM, K.A.H.).

Boletus firmus Frost *in* Bull. Buffalo Soc. Nat. Sci. 2:103. 1874.
On bare soil under *Fagus* sp. (beech). Colchester Co. 13 July 1931-A.H.S., L.E.W. (W-610, 610a).

Boletus flammans Dick & Snell *in* Mycologia 57:453. 1965.
Under conifers. Kings and Queens Co. 15 Sept. 1963-K.A.H. (KM-5344 *in* DAOM) (ACAD 10519, D.W.G., K.A.H.).

Boletus fraternus Pk. *in* Bull. Torrey Bot. Club 24:145. 1897.
Under hardwoods in mixed forests. 1976-D.W.G., K.A.H. (Homola 1207 in Univ. Michigan Herbarium, Ann Arbor, coll. R.L. Homola, reported by Snell and Dick).

Boletus griseus Frost apud Pk. *in* Annu. Rep. N.Y. State Mus. 29:45. 1878.
In deciduous forests, often under *Fagus* sp. (beech) and *Quercus* sp. (oak). Kings Co. 1973-D.W.G., K.A.H. (ACAD 10413).

Boletus huronensis Smith & Thiers *in* Boletes of Mich.:306. 1971.
In coniferous woods. Kings Co. 23 Aug. 1952-K.A.H. (KM-2012, 5351 *in* DAOM as *Boletus impolitus* Fr.) (ACAD 10408, D.W.G., K.A.H.).

Boletus inedulis (Murr.) Murr. *in* Mycologia 30:525. 1938.
Boletus calopus Fr.
Boletus pachypus Fr.
Boletus radicans Pers. ex Fr.
Under conifers. Annapolis, Halifax, Kings and Pictou Co. 1888-J.S. (A.H.M.) (L.E.W.-670 as *B. pachypus*) (ACAD 10409, D.W.G., K.A.H.).

Boletus luridus Fr. *in* Syst. Mycol. 1:391. 1821.
Under conifers. Colchester, Guysborough and Kings Co. 1880-J.S. (L.E.W.-544) (KM-564, 590, 597 *in* DAOM, K.A.H.) (Snell, in litt., states most N.S. collections probably *B. subvelutipes* Pk.)

Boletus magnisporus Frost *in* Morgan. Myc. Miami Polyp.:7. 1883-88.
From Halifax Co. 1908-A.H.M.

Boletus miniato-pallascens Smiths & Theirs *in* Boletes of Mich.:272. 1971.
In mixed conifer and deciduous woods. Kings Co. 25 Aug. 1952-K.A.H. (KM-1734, 3031, 3034, 3036, 5352, 5353 *in* DAOM, as *B. miniato-olivaceus* Frost) (ACAD 10367, D.W.G., K.A.H.).

Boletus ornatipes Pk. *in* Annu. Rep. N.Y. State Mus. 29:67. 1878.
Under hardwoods, usually *Fagus* sp. (beech) and *Quercus* sp. (oak). Annapolis and Kings Co. 1913-A.H.M. (ACAD 10389, D.W.G., K.A.H.) (KM-570, 571, 993, 1727 *in* DAOM, K.A.H.).

Boletus parasiticus Fr. *in* Syst. Mycol. 1:389. 1821.
Xerocomus parasiticus (Bull. ex Fr.) Quél.
Parasitic on the gasteromycete *Scleroderma citrinum* Pers. Kings Co. 1976-D.W.G., K.A.H. (ACAD 11113, coll. N.L.N.).

Boletus piperatus Bull. ex Fr. *in* Syst. Mycol. 1:388. 1821.
Under conifers and on soil in open fields. Annapolis, Colchester, Kings and Pictou Co. 1913-A.H.M. (KM-567, 568, 3715 *in* DAOM, K.A.H.) (ACAD 10303, D.W.G., K.A.H.) (L.E.W.-584).

Boletus pseudopeckii Smith and Thiers *in* Boletes of Mich.:325. 1971.
Boletus peckii Frost.
Boletus peckii Frost apud Pk. var. *laevipes* Pk.
In conifer woods. Colchester, Halifax and Kings Co. 1913-A.H.M. (L.E.W.-696 as *B. peckii*) (ACAD 10362, D.W.G., K.A.H.) (KM-2024 *in* DAOM, as *B. peckii*).

Boletus pseudosulphureus Kallenbach *in* Z. Pilzkd. 2:225-230. 1923, var. **pallidus** Grund & Harrison *in* Nova Scotian Boletes:108. 1976.
In mixed coniferous-deciduous woods. Annapolis Co. 20 Aug. 1975-D.W.G., K.A.H. (ACAD 11412).

Boletus pulverulentus Opat. *in* Wiegmaan's Arch. Naturgesch. 2:27. 1836.
On moist soil in woods. Guysborough Co. 2 Sept. 1957-K.A.H. (coll. and reported by W.H. Snell) (KM-3791, 3792 *in* DAOM).

Boletus rubellus Krombh. var. **rubellus** *in* Nat. Abb. Schw. 5:12. 1836.
In mixed conifer woods. Halifax and Kings Co. 1913-A.H.M. (as *Boletus purpureus* Fr., syn. *Boletus sanguineus* Krombh.) (Snell 2570, D.W.G., K.A.H.).

Boletus rubinellus Pk. *in* Annu. Rep. N.Y. State Mus. 32:33. 1879.
Chalciporus rubinellus (Pk.) Sing.
Suillus rubinellus (Pk.) Sing.
In mixed woods. Annapolis, Colchester, Kings and Pictou Co. 1913-A.H.M. (KM-512-574, 3004-3006 *in* DAOM, K.A.H.) (L.E.W.-621) (ACAD 10361, D.W.G., K.A.H.).

Boletus satanas Lenz *in* Fr. Bol.:26. 1831.
From Antigonish Co. 1908-A.H.M.

Boletus sensibilis Pk. var. **sensibilis** *in* Annu. Rep. N.Y. State Mus. 32:33. 1879.
In woods of *Fagus* sp. (beech). Kings Co. 1976-D.W.G., K.A.H. (ACAD 10385, 10350).

Boletus separans Pk. var. **separans** *in* Bull. Buffalo Soc. Nat. Sci. 1:59. 1873.
In woods of *Pinus* sp. (pine). Halifax and Kings Co. 1908-A.H.M. (ACAD 10341, D.W.G., K.A.H.).

Boletus spadiceus Fr. var. **spadiceus** *in* Epicr. Syst. Mycol.:415. 1838.
Suillus spadiceus (Fr.) Kuntze.
Xerocomus spadiceus (Fr.) Quél.
In mixed woods. Kings Co. 1976-D.W.G., K.A.H. (ACAD 10327).

Boletus speciosus Frost *in* Bull. Buffalo Soc. Nat. Sci.:101. 1874.
From Kings Co. Sept. 1932-K.A.H. (KM-577, 578, 2157, 3007, 5363 *in* DAOM).

Boletus subglabripes Pk. *in* Bull. N.Y. State Mus. 2(8):112. 1889.
Boletus flavipes Pk.
Leccinum subglabripes (Pk.) Sing.
In mixed woods. Annapolis and Kings Co. 1913-A.H.M. (KM-741, 3017, 3803-3807 *in* DAOM, K.A.H.) (ACAD 10203, D.W.G., K.A.H.).

Boletus subtomentosus Fr. var. **subtomentosus** *in* Syst. Mycol.:389. 1821.
Leccinum subtomentosum (Fr.) S.F. Gray.
On soil and in coniferous woods. Colchester, Halifax, Hants and Kings Co. 1908-A.H.M. (KM-582, 583, 598, 599 *in* DAOM K.A.H.) (ACAD 11110, D.W.G., K.A.H.) (L.E.W.-550).

Boletus subvelutipes Pk. *in* Bull. N.Y. State Mus. 2(8):142. 1889.
Suillus subvelutipes (Pk.) Kuntze.
In mixed woods. Cumberland, Kings and Richmond Co. 26 Aug. 1952-K.A.H. (KM-2158, 3023, 3024, 5035, 5365, 5366 *in* DAOM) (ACAD 11214, D.W.G., K.A.H.).

Boletus vermiculosus Pk. *in* N.Y. State Cab. Rep. 23:130. 1872.
Under *Quercus* sp. (oak) or in mixed woods. Kings Co. 31 July 1938-K.A.H. (KM-732, 735 *in* DAOM) (ACAD 10477, D.W.G., K.A.H.).

Bombardia coprophila (Fr.) Kirschst. *in* Krypt. Fl. Mark Brandenb. 7(2):185. 1911.
On cow and porcupine dung. Colchester and Inverness Co. 4 Sept. 1927-L.E.W. (W-1313, 1595) (A.R.P. 434).

Bombardia lutea (Ell. & Ev.) Wehm. *in* Can. J. Res. C, 20:576. 1942.
Sordaria lutea Ell. & Ev.
On decayed wood. Colchester and Halifax Co. 30 July 1931-L.E.W. (W-1187, 1187a).

Botryobasidium pruinatum (Bres.) Donk *in* Fungus 28:26. 1958.
Corticium pruinatum Bres.
Pellicularia pruinata (Bres.) Rogers
On *Fagus grandifolia* Ehrh. (beech) and other woods. Colchester Co. July 1935-L.E.W. (W-1732, 1765 det. H.S.J.).

Botryobasidium subcoronatum (Höhn. & Litsch.) Donk *in* Meded. Ned. Mycol. Ver. 18-20:117. 1931.
Corticium subcoronatum Höhn. & Litsch.
Pellicularia subcoronata (Höhn. & Litsch.) Rogers.
On coniferous wood, *Picea* sp. (spruce). Colchester and Kings Co. 13 August 1935-L.E.W. (W-1783 fide H.S.J.) (KM-142 in DAOM, K.A.H. det. I. Mounce).

Botryobasidium vagum (Berk. & Curt.) Rogers *in* Univ. Iowa Stud. Nat. Hist. 17(1):17. 1935.
Corticium vagum Berk. & Curt.
Pellicularia vaga (Berk. & Curt.) Rogers.
On *Abies balsamea* (L.) Mill. (balsam fir), *Alnus* sp. (alder), *Lenzites* sp. (a fungus), and *Picea* sp. (spruce). Colchester and Kings Co. 8 July 1931-L.E.W. (W-428 a-c, 1720, 1765a) (KM-127, 127a,b *in* DAOM, K.A.H.) (O-F5481, 5482, 5487).

Botryohypochnus isabellinus (Fr. ex Schleich.) Erikss. *in* Sven. Bot. Tidskr. 52:2, f. 1. 1958.
Botryobasidium isabellinum (Fr. ex Pers.) Rogers.
Pellicularia isabellina (Fr. ex Schleich.) Rogers.
On coniferous and deciduous wood. Colchester Co. 29 July 1935-L.E.W. (W-1755 fide H.S.J.).

Botryosphaeria fuliginosa (Moug. & Nestl.) Ell. & Ev. *in* North Am. Pyren.:546. 1890.
On *Fagus grandifolia* Ehrh. (beech). Colchester Co. 1950-L.E.W. (W-1741).

Botryosphaeria laricis (Wehm.) v. Arx & Müller *in* Krypt. Fl. Schweiz 11:42. 1954.
Physalospora laricis Wehm.
On twigs of *Larix laricina* Koch (tamarack or larch). Colchester Co. 3 July 1931-L.E.W. (W-374, 434).

Botryosphaeria obtusa (Schw.) Shoem. *in* Can. J. Bot. 42:1298. 1964.
Physalospora obtusa (Schw.) Cke.
Stat. conid. *Sphaeropsis malorum* Pk.
On *Amelanchier intermedia* Spach (shadbush), *Cydonia oblonga* Mill. (quince), *Malus pumila* Mill. (apple) and *Sorbus americana* Marsh. (mountain ash). General. 1886-J.S. (A.H.M.) (DAOM 35020).

Botryosphaeria quercuum (Schw.) Sacc. *in* Syll. Fung. 1:456. 1882; Can. J. Bot. 42:1297-1301. 1964.
Sphaeria quercuum Schw.
On *Quercus rubra* L. (*Q. borealis* Michx. f.) (red oak). Kings Co. 4 Apr. 1953-K.A.H. (DAOM 54345).

Botryosphaeria rhodorae (Cke.) Barr *in* Mycologia 62:381. 1970.
Stat. macroconidia *Phyllostictina maxima* (Ell. & Ev.) Petrak.
Stat. microconidia *Asteromella saccardoi* (Thüm.) Petrak.
On *Rhododendron* sp. Annapolis and Kings Co. June 1933-J.F.H. (DAOM 143020, 145751, 145752, 145840, C.O.G., K.A.P.).

Botryosphaeria stevensii Shoem. *in* Can. J. Bot. 42:1299. 1964.
Physalospora mutila N. E. Stev.
On *Quercus rubra* L. (red oak). 1975-L.P.M., J.M.M.

Botryosphaeria vaccinii (Shear) Barr *in* Mycologia 62:379. 1970.
Guignardia vaccinii Shear, basionym.
Stat. conid. *Phyllosticta elongata* Weidemann *in* Mycologia 74:62. 1982.
On *Vaccinium macrocarpon* Ait. (cranberry). Annapolis, Kings and Richmond Co. 1907-C.L.S.

★**Botryosporium longibrachiatum** (Oud.) Maire *in* Ann. Mycol.:341. 1904.
From *Fragaria* sp. (cultivated strawberry) and *Solanum tuberosum* L. (potato). Kings Co. May 1967-C.O.G. (DAOM 153469, 153470).

Botryotinia convoluta (Drayton) Whetzel *in* Mycologia 37:679. 1945.
Sclerotinia convoluta Drayton.
On stems of *Iris germanica* L. (German iris). Kings Co. 24 Mar. 1958-J.F.H.

Botryotinia draytonii (Buddin & Wakef.) Seav. *in* North Am. Cup-Fungi (Inoperculates):62. 1951.
Sclerotinia draytonii Buddin & Wake.
Stat. conid. *Botrytis gladiolorum* Timm.
On corms of *Gladiolus* sp. Kings Co. May 1935-J.F.H.

Botryotinia fuckeliana (de Bary) Whetzel *in* Mycologia 37:679. 1945.
Sclerotinia fuckeliana (de Bary) Fckl.
Stat. conid. *Botrytis cinerea* Pers.
Causing blight and/or fruit rot on many hosts. General. 1923-A.K.

Botryotinia narcissicola (Greg.) Buchw. *in* Contrib. Dep. Plant Pathol. R. Vet. Agric. Coll. Copenhagen 32:137. 1949.
Sclerotinia narcissicola Greg.
Stat. conid. *Botrytis narcissicola* Kleb.
On bulbs of *Narcissus* sp. (imported). Hants Co. 1943-J.F.H.

Botrytis allii Munn *in* Bull. N.Y. Agric. Exp. Stn. 437:396. 1917.
Neck rot of *Allium cepa* L. (onion). Kings Co. March 1925-J.F.H.

Botrytis cinerea Pers. *in* Syn. Fung.:690. 1801.
See stat. perf. *Botryotinia fuckeliana* (de Bary) Whetzel.

Botrytis elliptica (Berk.) Cke. *in* J. R. Hortic. Soc. 26:129. 1902.
On *Lilium* sp. (lily). Annapolis Co. 25 May 1951-A.D.P., J.F.H.

Botrytis fabae Sard. *in* Mem. R. Soc. Esp. Hist. Nat., 15:291. 1929.
On *Vicia faba* L. var. *minor* (Peterm.) Beck. (broadbean). Annapolis Co. 9 Sept. 1971-C.O.G. (DAOM 137145).

Botrytis paeoniae Oud. *in* Hedwigia 37:182. 1898.
On *Paeonia* sp. (peony). Kings Co. 18 June 1925-J.F.H.

Botrytis tulipae Lind *in* Danish Fungi, errata at end of book. 1913.
On *Tulipa* sp. (tulip). Kings Co. 4 June 1926-J.F.H.

Bovista minor Morg. *in* J. Cinc. Soc. Nat. Hist. 14:147. 1892.
From Kings Co. 1977-S.F.M. (S.F.M.-30, 60, 154, 328, 329 *in* ACAD).

Bovista pila Berk. & Curt. *in* Grevillea 2:49. 1873.
On sandy soil. Colchester, Halifax, Kings, Pictou, Richmond and Victoria Co. 1913-A.H.M. (DAOM 39443, Kings Co.) (S.F.M.-124, 216, 286 *in* ACAD) (L.E.W.-1215, 1215a, 1224a, 1370 coll. A.H.S.).

Bovista plumbea Pers. *in* Syn. Fung.:137. 1801.
On sandy soil and under conifers. Colchester, Halifax, Kings, Pictou and Victoria Co. 1881-J.S. (L.E.W.-1224, 1405 coll. A.H.S.) (S.F.M.-167, 187, 379 *in* ACAD).

Bovista polymorpha (Vitt.) Kreisel *in* Feddes Repert. 69:201. 1964.
Lycoperdon polymorphum Vitt.
Open pastures. Annapolis, Colchester, Hants and Kings Co. 18 Aug. 1931-L.E.W. (W-1369 coll. A.H.S.) (S.F.M.-65, 66, 312-317, 325, 344 *in* ACAD).

Bovista pusilla (Batsch) Pers. *in* Syn. Fung.:138. 1801.
Lycoperdon pusillum Pers.
On roots of a *Salix* sp. (willow) and on soil. Halifax and Kings Co. 1881-J.S. (1908-A.H.M.) (S.F.M.-249-252, 355 *in* ACAD).

Bremia lactucae Regel *in* Oesterr. Bot. Z. 1:666. 1843.
On *Lactuca sativa* L. (lettuce) and *Sonchus oleraceus* L. (annual sow thistle). Colchester and Kings Co. 12 Sept. 1930-J.F.H. (L.E.W.-1318).

Brunchorstia pinea (Karst.) Höhn. *in* Sitzungsber. K. Akad. Wiss. Math.-Naturwiss. Kl. 124:143. 1915.
See stat. perf. *Gremmeniella abietina* (Lagerb.) Morelet.

Buergenerula spartinae Kohlm. & Gessner *in* Can. J. Bot. 54:1764. 1976.
On *Spartina alterniflora* Loisel. (cord-grass). Kings Co. 9 Aug. 1975-G.J.B., D.W.G.

Bulgaria inquinans (Pers. ex Hook.) Fr. *in* Syst. Mycol. 2:166. 1822.
Burcardia turbinata Schmidt.
Phaeobulgaria inquinans Seav.
On fallen *Quercus* sp. (oak). Kings Co. 24 Oct. 1952-K.A.H. (KM-1692 *in* DAOM).

Byssonectria violacea (J.C. Schm.) Seav. *in* Mycologia 2:65. 1910.
Hypomyces violaceus (Schmidt.) Tul.
On *Fuligo septica* (L.) Gmel. (myxomycete). Pictou Co. 15 Aug. 1931-L.E.W. (W-1323).

Byssonectria viridis (Alb. & Schw. ex Berk. & Br.) Petch *in* J. Bot. 75:220. 1937.
Peckiella viridis (Alb. & Schw.) Sacc.
On *Russula* spp. Colchester and Kings Co. 16 July 1931-L.E.W. (W-1058 as *P. viridis* leg. A.H.S.) (KM-5183 *in* DAOM, K.A.H.).

Calcarisporium arbuscula Preuss *in* Linnaea 24:124. 1851.
From crown of *Fragaria* sp. (cultivated strawberry), with other fungi from mouldy hay of *Trifolium pratense* L. var. *sativum* (Mill.) Schreb. (red clover) and callus tissue of *Vaccinium angustifolium* Ait. (lowbush blueberry). Digby and Kings Co. 22 Jan. 1964-C.O.G.

Caldesiella ferruginosa (Fr.) Sacc. *in* Michelia 2:303. 1881.
Tomentella ferrugineus Pers.
Hypochnus ferrugineus (Pers.) Fr. (Syll. Fung. 6:660. 1888).
On *Betula lutea* Michx. f. (yellow birch) and *Populus* sp. (poplar). 1975-L.P.M., J.M.M.

Caliciopsis pinea Pk. *in* Annu. Rep. N.Y. State Mus. 33:32. 1880.
On *Pinus strobus* L. (white pine). 1975-L.P.M., J.M.M.

Calicium abietinum Pers. *in* Ust. Ann. Bot.:20. 1794.
Lichen on coniferous wood. Colchester Co. 11 July 1931-L.E.W. (W-106, 490 det. J.L.L.).

Calocera cornea (Batsch ex Fr.) Loudon *in* Encycl. Pl.:1012. 1829.
On *Betula* sp. (birch) and *Fagus* sp. (beech). Colchester Co. 11 July 1931-L.E.W. (W-488, 488a).

Calocera viscosa (Pers.) Fr. *in* Syst. Mycol. 1:486. 1821.
On *Abies balsamea* (L.) Mill. (balsam fir) and other coniferous wood. Colchester Co. 20 July 1931-L.E.W. (W-488b,c).

Calocybe ionides (Bull. ex Fr.) Kühner ex Sorok. *in* Beih. Nova Hedwigia 5:43. 1962.
Lyophyllum ionides Kühner & Romagn.
Tricholoma ionides (Bull. ex Fr.) Kummer.
On lawn. Kings Co. 23 July 1953-K.A.H. (KM-2743 *in* DAOM).

Calomyxa metallic (Berk.) Nieuwl. *in* Am. Midl. Nat. 4:335. 1916.
Margarita metallica (Berk.) List.
On rotten wood and bark, sometimes on bark from living trees. Pictou Co. 1913-C.L.M.

Calonectria cucurbitula (Tode ex Fr.) Sacc. *in* Michelia 1:312. 1878.
Nectria cucurbitula (Tode ex Fr.) Fr.
Ophionectria cylindrospora Sollm.
Scoleconectria cucurbitula (Tode ex Fr.) Booth.
On *Abies balsamea* (L.) Mill. (balsam fir) and *Pinus strobus* L. (white pine).
Colchester, Halifax and Kings Co. 6 July 1929-L.E.W. (W-29, 362a).

Calonectria nivalis Schaff. *in* Mycol. Centralbl. 2:255. 1913.
See *Monographella nivalis* (Schaff) E. Müller var. *nivalis*.

Calosphaeria minima Tul. *in* Sel. Fung. Carp. 2:112. 1863.
On *Cornus alternifolia* L.f. (alternate-leaved dogwood). Colchester Co. 15 July 1931-L.E.W. (W-1055).

Calvatia bovista (Pers.) Kambly & Lee *in* Univ. Iowa Stud. Nat. Hist. 17(4):138. 1936.
Calvatia caelata (Bull.) Morg.
In pastures. Halifax Co. 1880-J.S. (A.H.M.).

Calvatia cyathiformis (Bosc) Morg. *in* J. Cinc. Soc. Nat. Hist. 12:168. 1890.
From Hants, Kings and Pictou Co. 1913-A.H.M. (S.F.M.-6, 30, 37, 41, 351 *in* ACAD).

Calvatia elata (Massee) Morg. *in* J. Cinc. Soc. Nat. Hist. 12:172. 1890.
On soil. Colchester, Halifax and Richmond Co. 1881-J.S. (as *Lycoperdon saccatum* Vahl.)(L.E.W.-1302 coll. A.H.S.)(S.F.M.-275, 276 *in* ACAD).

Calvatia excipuliforme (Pers.) Perdeck var. **excipuliforme** *in* Blumea 6:490. 1950.
Lycoperdon excipuliforme Pers.
On lawns and pastures. Kings Co. 1977-S.F.M. (S.F.M.-211 *in* ACAD).

Calvatia gigantea (Batsch ex Pers.) Lloyd *in* Mycol. Writ. 1:note 269, p. 166. 1904.
Clavatia maxima (Schaeff.) Morg.
Lycoperdon giganteum Batsch ex Pers.
From Halifax and Kings Co. 1881-J.S. (A.H.M.)(S.F.M.-106 *in* ACAD).

Camarographium abietis Grove *in* Br. Stem and Leaf Fungi 2:107. 1937.
Camarosporium abietis Wilson & Anders.
On *Pseudotsuga menziesii* (Mirb.) Franco (Douglas fir). Kings Co. 21 May 1953-D.W.C.

Camarosporium lauri Grove *in* Br. Stem and Leaf Fungi 2:97. 1937.
Hendersonia sarmentorum var. *lauri* Cke.
On *Parthenocissus quinquefolia* (L.) Planch. (virginia creeper), *Sambucus*

canadensis L. (elder) and *Sorbus americana* Marsh. (mountain ash). Cumberland and Kings Co. 28 Feb. 1951-D.W.C., K.A.H., C.O.G.

★**Camarosporium macrosporum** Sacc. *in* Syll. Fung. 3:461. 1884.
On new wood of *Philadelphus coronarius* L. (mock orange). Kings Co. 9 July 1969-C.O.G.

Camarosporium robiniae Sacc. *in* Syll. Fung. 3:459. 1884.
See *Cucurbitaria elongata* (Fr.) Grev.

Camarosporium tanaceti Oud. *in* Contrib. Flore Mycol. Pays-Bas 17:269. 1901.
On *Tanacetum vulgare* L. (tansy). Colchestser Co. Aug. 1929-L.E.W. (W-257).

★**Candida albicans** (Robin) Berkhout *in* DeSchimmel-Geslachen, *Monilia, Oidium, Oospora* en *Torula*:59. 1923. (Thesis, Univ. Utrecht).
From stem of *Rhododendron* sp. Kings Co. 7 Mar. 1972-C.O.G.

Cantharellula cyathiformis (Bull. ex Fr.) Sing. *in* Rev. Mycol. 1:281. 1936.
Clitocybe cyathiformis (Bull. ex Fr.) Kummer (1871).
On old logs and mossy lawn near shrubs. Colchester and Kings Co. 26 Aug. 1931-A.H.S., L.E.W. (W-824) (KM-194, 895, 2575, 4635, 4646, 5285, 5286 *in* DAOM, K.A.H.).

Cantharellula ectypoides (Pk.) Sing. *in* Lloydia 5:120. 1942.
Clitocybe ectypoides Pk.
Pseudoarmillariella ectypoides (Pk.) Sing.
On rotten conifer wood and in coniferous or mixed woods. Annapolis, Colchester, Hants and Kings Co. 1913-A.H.M. (L.E.W.-677a)
(KM-196, 899, 2179, 4645, 5282 *in* DAOM, K.A.H.).

Cantharellula umbonata (Fr.) Sing. *in* Rev. Mycol. 1:281. 1936.
Cantharellus umbonatus Fr.
On moss. Kings Co. 2 Sept. 1930-K.A.H. (KM-189, 190, 960, 1609, 1718, 4001 *in* DAOM).

Cantharellus camphoratus Petersen *in* Nova Hedwigia 31:3. 1979.
From Kings Co. 29 Aug. 1973-R.H.P. (TENN 38025 type).

Cantharellus cibarius Fr. *in* Syst. Mycol. 1:318. 1821.
On humus in coniferous and mixed woods. General. 1886-J.S. (A.H.M.) (KM-179, 928, 3989, 3990, 3995 *in* DAOM, K.A.H.) (L.E.W.-598).

Cantharellus flavobrunneus Petersen *in* Nova Hedwigia 31:14. 1979.
Under *Betula* sp. (birch) and *Picea* sp. (spruce). Kings Co. 30 Aug. 1973-R.H.P. (TENN 38030).

Cantharellus lateritius (Berk.) A.H. Smith *in* Mich. Bot. 7:159. 1968.
Craterellus cantharellus (Schw.) Fr.
Craterellus lateritius Berk.
In woods. Halifax and Victoria Co. 1912-Thomas Langton.

Cantharellus morgani Pk. *in* Bot. Gaz. 7:43. 1882.
Clitocybe morgani (Pk.) Bigelow (1962).
See *Hygrophoropsis morgani* (Pk.) Bigelow.

Cantharellus pallidipes Petersen *in* Nova Hedwigia 31:7. 1979.
On heavy humus or very rotten wood. Kings Co. 30 Aug. 1973-R.H.P. (TENN 38031, 38224 type, 38280).

Cantharellus tubaeformis Fr. *in* Syst. Mycol. 1:319. 1821.
Cantharellus infundibuliformis (Scop.) Fr.
Clitocybe infundibuliformis (Fr.) Quél.
Craterellus infundibuliformis Fr.
From Colchester, Kings, Pictou and Shelburne Co. 1890-J.S. (A.H.M.) (KM-183-187, 199, 200, 959, 1617, 3996, 3997, 3998 *in* DAOM, K.A.H.) (L.E.W.-549, 607, 801).

Cantharellus xanthopus (Pers.) Duby *in* Bot. Galic. 2:799. 1830.
Cantharellus lutescens Fr.
Craterellus lutescens Fr.
Under *Picea* sp. (spruce) and in wooded ravine. Colchester, Halifax and Kings Co. 1913-A.H.M. (KM-1454, 3993, 3994, 5386 *in* DAOM, K.A.H.) (L.E.W.-733).

Catathelasma imperiale (Fr. apud Lund) Sing. *in* Rev. Mycol. 5:9. 1940.
Armillaria imperalis (Fr.) Quél.
Under conifers. Kings Co. 30 Aug. 1930-K.A.H. (KM-174, 1812, 2552 *in* DAOM) (KM-985 *in* DAOM as *Armillaria ponderosa* Pk.).

Catathelasma ventricosa (Pk.) Sing. *in* Rev. Mycol. 5:9. 1940.
Armillaria ventricosa Pk.
On humus under *Picea* sp. (spruce). Colchester Co. 1931-A.H.S., L.E.W. (W-644 as *A. ventricosa*).

Catenaria anguillulae Sorok. *in* Ann. Sci. Nat. Bot., Sér. 6, 4:67, pl. 3, fig. 6-28. 1876.
In association with nematodes from compost and dung (chicken, cow, horse, sheep). Kings Co. 1980-M.E.A.

Caulorhiza umbonata (Pk.) Lennox *in* Mycotaxon 9(1):154. 1979.
Collybia umbonata Pk.
Marasmius umbonatus Pk.
On needles of *Picea* sp. (spruce). Kings and Lunenburg Co. 24 June 1968-K.A.H. (MICH 8878, 11627, 11628, 11629, 11633, 11635, 11636).

Cenangium acuum Cke. & Pk. *in* Cooke & Ellis, Grevillea 7:40. 1878.
On *Pinus resinosa* Ait. (red pine). 1975-L.P.M., J.M.M.

Cenangium ferruginosum Fr. ex Fr. *in* Syst. Mycol. 2:187. 1823.
Cenangium abietis (Pers.) Rehm.
On *Pinus banksiana* Lamb. (jack pine), *P. contorta* Dougl. (shore pine), *P. resinosa* Ait. (red pine), *P. strobus* L. (white pine), *P. sylvestris* L. (Scots pine) and *P. thunbergii* Parl. (Japanese black pine). Kings Co. 30 April 1953-C.O.G.

Cenangium fuckelii Sacc. *in* Miscell. Mycol. (Venezia) Ser. 1:8. 1884.
On *Corylus cornuta* Marsh. (beaked hazelnut). Kings Co. 1950-L.E.W. (O-4646 det. J.W.G.).

Centrospora acerina (Hartig) Newhall *in* Phytopathology. 36:894. 1946.
See *Mycocentrospora acerina* (Hartig) Deighton.

★**Cephalosporium acremonium** Cda. *in* Icon. Fung. 3:11. 1839.
On calyx of *Fragaria* sp. (cultivated strawberry) and from milled peat, *Sphagnum* sp. Kings Co. 1961-C.O.G.

★**Cephalosporium curtipes** Sacc. *in* Michelia 2:286. 1881.
From stem of *Brassica oleracea* L.var. *gemmifera* Zenker (Brussels sprouts). Kings Co. 25 Sept. 1974-C.O.G.

★**Cephalosporium roseum** Oud. *in* Ned. Kruidk. Arch. 2, Ser. 4:249. 1884.
From stored roots of *Daucus carota* L. var. *sative* DC. (cultivated carrot) and skin rot of *Solanum tuberosum* L. (potato). Kings Co. 10 Jan. 1964-C.O.G.

Ceraceomyces serpens (Fr.) Ginns *in* Can. J. Bot. 54:146. 1976.
Merulius porinoides Fr.
On *Fagus grandifolia* Ehrh. (beech). Inverness and Colchester Co. 1 July 1933-L.E.W. (W-1570, fide M.A.D.) (FPF 2107 *in* DAOM).

Ceratiomyxa fruticulosa (Müll.) Macbr. *in* North Am. Slime-Moulds:18. 1899.
On decayed wood. Colchester and Pictou Co. 1906-C.L.M. (L.E.W.-133, 388).

Ceratocystis ulmi (Buism.) C. Moreau *in* Rev. Mycol. Suppl. Colonial 17:22. 1952.
Stat. conid. *Graphium ulmi* Schwartz.
Conid. state on *Ulmus americana* L. (American elm). Kings Co. 3 Dec. 1970-R.G.R., C.O.G.

Ceratocystis sp.
On seed of *Pyrus communis* L. (pear), from diseased *Rhododendron* cuttings in rooting medium and from milled peat, *Sphagnum* sp. Kings Co. 1962-C.O.G. (DAOM 154294).

Ceratostoma parasiticum Ell. & Ev. *in* North Am. Pyren.:191. 1890.
On *Fomes fomentarius* (L.) Gill. (a tree fungus). Colchester Co. 20 July 1931-L.E.W. (W-1106).

Cercoseptoria crataegi (Ell. & Ev.) Davis *in* Trans. Wis. Acad. Sci. Arts Lett. 15:271. 1927.
On leaves of *Crataegus macrosperma* Ashe (common hawthorn). Kings Co. 19 July 1951-D.W.C.

Cercospora angulata Wint. *in* Hedwigia 24:202. 1885.
On *Ribes nigrum* L. (black currant). Colchester and Pictou Co. 3 Aug. 1925-W.K.M.

Cercospora apii Fres. *in* Beitr. Mycol. 3:91. 1863.
On *Apium graveolens* L. var. *dulce* Pers. (celery). Kings Co. 12 Sept. 1938-J.F.H.

Cercospora beticola Sacc. *in* Nuovo G. Bot. Ital. 8:189. 1876.
On leaves of *Beta vulgaris* L. (beet and mangel) and *B. vulgaris* var. *cicla* (L.) Moq. (Swisschard). Kings and Halifax Co. 9 Aug. 1938-J.F.H.

Cercospora callae Pk. & Clint. *in* Annu. Rep. N.Y. State Mus. 29:52. 1878.
On leaves of *Calla palustris* L. (wild calla, water arum). Pictou Co. 1938-A.H.M.

Cercospora carotae (Pass.) Solh. *in* Biol. Monogr. 12:43. 1929.
On leaves of *Daucus carota* L. var. *sativa* DC. (carrot). Annapolis Co. 6 Sept. 1951-K.A.H.

Cercospora dubia (Riess) Wint. *in* Syll. Fung. 4:456. 1886.
On leaves of *Atriplex patula* L. (orach). Kings Co. 31 July 1951-D.W.C., I.L.C.

Cercospora epigaeae Ell. & Dearn. *in* Trans. Can. Inst. 6:637. 1899.
On leaves of *Epigaea repens* L. (mayflower). Kings Co. 19 June 1952-D.W.C.

Cercospora fingens Davis *in* Trans. Wis. Acad. Sci. Arts Lett. 18:92. 1915.
On leaves of *Thalictrum polygamum* Muhl. (meadow rue). Lunenburg Co. 30 Aug. 1951-D.W.C., I.L.C.

★**Cercospora granuliformis** Ell. & Holway *in* J. Mycol. 1:6. 1885.
On leaves of *Viola tricolor* L. (pansy). Kings Co. 22 July 1961-K.A.H.

Cercospora guttulata Ell. & Kellerm. *in* J. Mycol. 9:105. 1903.
On *Aristolochia durior* Hill (dutchman's-pipe or pipevine). Yarmouth Co. 7 Aug. 1931-J.F.H.

★**Cercospora handelii** Bubák *in* K. Naturhist. Hofmus. 23:106. 1909.
On leaves of *Rhododendron indicum* (L.) Sweet. (rhododendron). Hants and Kings Co. 10 July 1964-K.A.H. (DAOM 149574, C.O.G.)

Cercospora leptosperma Pk. *in* Annu. Rep. N.Y. State Mus. 30:55. 1878.
Cylindrosporium leptospermum Pk.
On leaves of *Aralia nudicaulis* L. (wild sarsaparilla). Hants and Pictou Co. 14 July 1942-J.F.H.

Cercospora microsora Sacc. *in* Michelia 2:128. 1880.
On leaves of *Tilia americana* L. (basswood), *T. cordata* Mill. (small-leaved linden) and *T. europea* L. (common linden). Annapolis Co. 8 Sept. 1932-R.W.W.

Cercospora pastinacea (Sacc.) Pk. *in* Bull. N.Y. State Mus. 157:45. 1912.
On leaves of *Pastinaca sativa* L. (parsnip). Pictou Co. 1935-C.A.B. (Can. Plant Dis. Surv. 15:30. 1935).

Cercospora pontederiae Ell. & Dearn. *in* Can. Res., Ser. 5:270. 1893.
On *Pontederia cordata* L. (pickerel weed). Halifax and Lunenburg Co. Aug. 1956-D.B.O.S. (Savile 3243, 3245 *in* DAOM).

Cercospora varia Pk. *in* Annu. Rep. N.Y. State Mus. 35:141. 1884.
On leaves of *Viburnum alnifolium* Marsh. (moosewood) and *V. Cassinoides* L. (witherod). Kings and Lunenburg Co. 30 Aug. 1951-D.W.C., I.V.H.

Cercospora violae Sacc. *in* Nuovo G. Bot. Ital. 8:187. 1876.
On *Viola tricolor* L. var *hortensis* DC. (pansy). 1903-B.D.H., J.A.K. (Kings Co. 21 Sept. 1928-J.F.H. det. K.A.H.)

Cercospora zebrina Pass. *in* Hedwigia 16:124. 1877.
On leaves of *Trifolium hybridum* L. (alsike clover) and *T. pratense* L. (red clover). Hants and Lunenburg Co. 29 July 1953-J.S.E., D.W.C.

Cercospora zonata Wint. *in* Hedwigia 23:191. 1884.
On leaves of *Vicia faba* L. (broad bean). Lunenburg Co. 1 Aug. 1951-P.M.G.

Cercosporella brassicae (Fautr. & Roum.) Höhn *in* Oesterr. Bot. Z. 66:105. 1916.
On *Brassica napobrassica* (L.) Mill. (Swede turnip). 1926. (Can. Plant Dis. Surv. 6:30. 1926).

Cercosporella pastinacae Karst. *in* Hedwigia 23:63. 1884.
Cercospora pastinacina Solh.
Ramularia pastinacae (Karst.) Lindr. & Vest.
On *Pastinaca sativa* L. (parsnip). Kings and Lunenburg Co. 22 July 1939-J.F.H.

Cercosporella persica Sacc. *in* Syll. Fung. 4:218. 1886.
Cercospora persica Sacc.
On *Prunus persica* (L.) Batsch (peach). 1903-B.D.H., J.A.K.

★**Cercosporella virgaureae** (Thüm.) Allesch. *in* Hedwigia 34:286. 1895.
Cercospora virgaureae Allesch.
On leaves of *Solidago sempervirens* L. (seaside goldenrod). Queens Co. 3 Aug. 1953-D.W.C.

Cercosporidium graminis (Fckl.) Deighton *in* Commonw. Mycol. Inst. Mycol. Pap. 112:62. 1967.
Cercospora graminis (Fckl.) Horsfall.
Passalora graminis (Fckl.) Höhn.
Scolecotrichum graminis Fckl.
On *Phleum pratense* L. (timothy). Kings Co. 22 July 1941-G.W.H.

Ceriosporopsis halima Linder *in* Barghoorn & Linder, Farlowia 1:409. 1944.
Ceriosporopsis barbata Höhnk.
On intertidal driftwood. Digby, Kings and Shelburne Co. 1970-G.A.N.

Ceriosporopsis tubulifera (Kohlm.) Kirk *in* Can. J. Bot. 50:1953. 1972.
Halosphaeria tubulifera Kohlm.
On driftwood and intertidal wood. Digby, Kings and Yarmouth Co. 1970-G.A.N.

Cerrena unicolor (Bull. ex Fr.) Murr. *in* J. Mycol. 9:91. 1903.
Daedalea unicolor Bull. ex Fr.
On *Acer pensylvanicum* L. (striped maple), *A. saccharum* Marsh. (sugar maple), *Fagus grandifolia* Ehrh. (beech), *Malus pumila* Mill. (apple) and species of *Acer, Alnus* (alder), *Betula* (birch) and *Prunus* (stone fruit). General. 1881-J.S. (KM-751-754, 4269 *in* DAOM, K.A.H.) (L.E.W.-68, 68a, 328, 6163 coll. A.R.P.) (DAOM 31411, 53718).

Ceuthospora lunata Shear *in* Bull. Torrey Bot. Club 34:312. 1907.
On fruit of *Vaccinium macrocarpon* Ait. (cranberry). Kings Co. Jan 1946-K.A.H.

Chaetomium anguipilium Ames *in* U.S. Army Res. & Dev., Ser. 2; Monogr. of Chaetomium:12. 1961.
From roots of *Fragaria* sp. (cultivated strawberry). Kings Co. Apr. 1967-C.O.G., J.W.G.

Chaetomium aterrimum Ell. & Ev. *in* Palliser, North Am. Flora (76) 3:62. 1910.
On mouse dung. Kings Co. 1 Nov. 1976-M.E.A. (LA-1 *in* ACAD).

Chaetomium aureum Chivers *in* Proc. Am. Acad. Arts Sci. 48:86. 1912.
From milled peat, *Sphagnum* sp., roots of *Fragaria* sp. (cultivated strawberry) and stems of *Vaccinium angustifolium* Ait. (lowbush blueberry). Kings Co. 1961-C.O.G.

Chaetomium brevipilium Ames *in* U.S. Army Res. & Dev., Ser. 2; Monogr. of *Chaetomium*:15. 1961.
From *Fragaria* sp. (cultivated strawberry) and *Vaccinium macrocarpon* Ait. (cranberry). Inverness and Kings Co. 30 Aug. 1964-C.O.G.

Chaetomium cochliodes Palliser *in* North Am. Flora 3:61. 1910.
From milled peat, *Sphagnum* sp., roots of *Fragaria* sp. (cultivated strawberry) and *Pisum sativum* L. (pea). Kings Co. 1961-C.O.G.

Chaetomium crispatum Fckl. *in* Symb. Mycol.:90. 1870.
On partridge dung. Kings Co. 19 Apr. 1977-M.E.A. (LA-36 *in* ACAD).

★**Chaetomium dolichotrichum** Ames *in* Mycologia 37:145. 1945.
On petiole of *Fragaria* sp. (cultivated strawberry). Kings Co. 21 Aug. 1964-C.O.G.

★**Chaetomium elatum** Kunze ex Fr. *in* Syst. Mycol. 3:254. 1829.
On canes of *Rubus idaeus* L. (red raspberry). Digby Co. 16 Dec. 1968-C.O.G.

Chaetomium funicolum Cke. *in* Grevillea 1:176. 1873.
From leaf of *Clivia* sp. (kafir lily) and roots of *Fragaria* sp. (cultivated strawberry). Hants and Kings Co. Apr. 1967-C.O.G.

Chaetomium globosum Kunze ex Fr. *in* Syst. Mycol. 3:255. 1829.
In culture from dung (grouse?), milled peat, *Sphagnum* sp. and from calyx of *Fragaria* sp. (cultivated strawberry). Colchester and Kings Co. 1931-L.E.W.

Chaetomium indicum Cda. *in* Icon. Fung. 4:38. 1840.
From deer dung and roots of *Fragaria* sp. (cultivated strawberry). Colchester and Kings Co. 1942-L.E.W. (C2 det. R.A.B.).

Chaetomium ochraceum Tschudy *in* Am. J. Bot. 24:475. 1937.
From root of *Fragaria* sp. (cultivated strawberry). Kings Co. Feb. 1968-C.O.G., J.W.G.

Chaetomium olivaceum Cke. & Ell. *in* Grevillea 6:96. 1878.
On hay mulch in orchard of *Pyrus communis* L. (pear). Kings Co. 12 May 1977-M.E.A. (LA-47 *in* ACAD).

Chaetomium reflexum Skolko & Groves *in* Can. J. Res., C, 26:279. 1948.
Isolated from forest soil. Cumberland Co. 1971-D.B. et al.

Chaetomium spinosum Chivers *in* Proc. Am. Acad. Arts Sci. 48:86. 1912.
Isolated from forest soil. Cumberland Co. 1971-D.B. et al.

Chaetomium spirale Zopf *in* Nova Acta Leopold. Carol. Akad. 42:275. 1881.
From fruit of *Vaccinium macrocarpon* Ait. (cranberry). Inverness Co. 23 Jan. 1970-C.O.G. (DAOM 146885).

Chaetomium subspirale Chivers *in* Proc. Am. Acad. Arts Sci. 48:84. 1912.
On rabbit dung. Kings Co. 19 Apr. 1977-M.E.A. (LA-37 *in* ACAD).

Chaetomium umbonatum Brewer *in* Proc. N.S. Inst. Sci. 27:59-60. 1971-73.
From pasture soil. Cumberland Co. Summer 1967-D.B. (I.M.I. 138895 type).

Chaetosphaeria multiseptata Sehm. *in* Can. J. Res., C, 20:576. 1942.
On decayed stump. Colchester Co. 26 July 1929-L.E.W. (W-78 type).

★**Chalaropsis thielavioides** Peyr. *in* LeStaz. Sper. Agric. Ital. 49:595. 1916.
On roots of *Daucus carota* L. var. *sativa* DC. (carrot). Kings Co. 29 Jan. 1962-C.O.G., S.J.H. (DAOM 88210).

Cheilymenia coprinaria (Cke.) Boud. *in* Hist. Class. Discom. d'Europe:63. 1907.
Lachnea coprinaria (Cke.) Phill.
Patella coprinaria (Cke.) Seav.

On dung. Colchester, Hants, Kings and Pictou Co. 7 July 1931-L.E.W. (W419, 419a,b) (KM-1160, 1161 *in* DAOM, K.A.H.)

Cheilymenia stercorea (Pers. ex Fr.) Boud. *in* Bull. Soc. Mycol. Fr. 1:105. 1885.
Lachnea alpina (Fckl.) Sacc.
Lachnea stercorea (Pers. ex Fr.) Gill.
Patella stercorea (Pers.) Weber.
On cow, moose and porcupine dung. Colchester Co. 3 July 1931-L.E.W. (W-376, 1254, 1254a).

Cheilymenia theleboloides (Alb. & Schw. ex Fr.) Boud *in* Icon. Mycol. pl. 381. 1904.
Lachnea theleboloides (Alb. & Schw. ex Fr.) Gill.
Patella theleboloides (Alb. & Schw.) Seav.
On moose dung. Hants Co. 16 July 1933-K.A.H. (KM-1164 *in* DAOM).

Cheimonophyllum candidissimus (Berk. & Curt.) Sing. *in* Sydowia 9:418. 1955.
Pleurotus candidissimus (Berk. & Curt.) Sacc.
On *Acer rubrum* L. (red maple) and other hardwoods. Colchester Co. 11 July 1931-A.H.S., L.E.W. (W-605).

Cheirospora botryopsora (Mont.) Hughes *in* Can. J. Bot. 36:748. 1958.
Thyrsidium botryosporum (Mont.) Mont.
On *Fagus grandifolia* Ehrh. (beech). Colchester Co. Sept. 1931-L.E.W. (W-1462).

Chlorosplenium aeruginascens (Nyl.) Karst. *in* Mycol. Fenn. 1:103. 1871.
Chlorociboria aeruginascens (Nyl.) Kanouse.
On decayed hardwood. Cape Breton and Colchester Co. 25 July 1931-L.E.W. (W-1155, 1155a).

Chlorosplenium aeruginosum (Oed.) de Not. *in* Comm. Soc. Critt. Ital. 1(5):376. 1864.
Chlorociboria aeruginosa (Oed. ex Gray) Seav.
On rotten wood of *Betula* sp. (birch), *Fagus* sp. (beech), *Populus* sp. (poplar), etc. Annapolis, Colchester, Kings and Pictou Co. 1913-A.H.M. (23 Aug. 1927-L.E.W., leg. A.R.P., 6039) (KM-1128, 1129, 1137, 1138, 1139 *in* DAOM, K.A.H.).

Chlorosplenium bulgarioides (Rabenh.) Karst. *in* Nat. Soc. Fauna Flora Fenn. 11:233. 1870.
Chlorociboria bulgarioides (Rabenh.) Ram., Korf & Batra.
Chlorociboria strobilina (Alb. & Schw.) Seav.
On cones of *Picea* sp. (spruce). Kings Co. 8 June 1932-K.A.H.

Chlorosplenium versiforme (Pers.) de Not. *in* Comm. Soc. Critt. Ital. 1(5):376. 1864.
Chlorociboria versiformis (Pers.) Seav.
On rotten wood. Colchester Co. 26 Aug. 1927-L.E.W. (leg. A.R.P. 6158, leg. A.H.S. 1385) (DAOM 45354).

Chondromyces indivisus Wehm. *in* Pap. Mich. Acad. Sci. Arts. Lett. 20:237. 1935.
On decayed wood, infected with *Chlorosplenium* sp. Colchester Co. August 1931-L.E.W. (W-1513).

Chondroplea populea (Sacc.) Kleb. *in* Phytopathol. Z. 6:229. 1933.
Dothichiza populea Sacc. & Briard.
See stat. perf. *Cryptodiaporthe populea* (Sacc.) Butin.

Chondrostereum purpureum (Pers. ex Fr.) Pouz. *in* Česká Mykol. 13(1):12. 1959.
Stereum purpureum (Pers. ex Fr.) Fr.
On *Acer rubrum* L. (red maple), *A. saccharum* Marsh. (sugar maple), *Betula populifolia* Marsh. (wire birch), *Malus* sp. (apple), *Populus tremuloides* Michx. (trembling aspen), *Prunus domestica* L. (plum), *Salix babylonica* L. (weeping willow) and other *Populus* and *Salix* spp. General. 1908-A.H.M. (KM-764, 765, 874, 2778, 2779 *in* DAOM, K.A.H.) (O-F5459).

Chroogomphus rutilus (Schaeff. ex Fr.) O. K. Miller *in* Mycologia 56:543. 1964.
Gomphidius rutilus (Schaeff. ex Fr.) Lund & Nannf.
From Kings Co. 2 Sept. 1930-K.A.H. (KM-281, 282, 283, 2160, 2619 *in* DAOM, as *Gomphidius viscidus* Fr. var. *testaceus* Fr., fide A.H.S.).

Chrysomyxa arctostaphyli Diet. *in* Bot. Gaz. 19:303. 1894.
Melampsorella caryophyllacearum Schroet.
Melampsorella cerastii (Pers.) Schroet.
Stat. aecid. *Peridermium coloradense* (Diet.) Arth. & Kern.
On *Abies balsamea* (L.) Mill. (balsam fir), *Arctostaphylos uva-ursi* Spreng. (bearberry), *Cerastium vulgatum* L. (mouse-ear chick-weed), *Picea glauca* (Moench) Voss (white spruce), *P. mariana* (Mill.) BSP. (black spruce), *P. pungens* Engelm. (Colorado blue spruce), *P. rubens* Sarg. (red spruce), *Stellaria media* (L.) Cyrillo (common chickweed) and *S. graminea* L. (stitchwort). General. 1913-W.P.F. (O-2442, 4511, 4516).

Chrysomyxa chiogenis Diet. *in* Bot. Gaz. 19:303. 1894.
On *Gaultheria hispidula* (L.) Muhl. (creeping snowberry). Colchester and Pictou Co. 1913-W.P.F. (as *Melampsoropsis chiogenis).*

Chrysomyxa empetri Schroet. ex Cummins *in* Mycologia 48:602. 1956.
On *Empetrum nigrum* L. (crowberry) and *Picea glauca* (Moench) Voss (white spruce). Kings and Lunenburg Co. 20 Aug. 1937-J.F.H.

Chrysomyxa ledi (Alb. & Schw.) de Bary var. **ledi** *in* Oesterr. Bot. Z. 37:809. 1879.
On *Ledum groenlandicum* Oed. (Labrador tea), *Picea glauca* (Moench) Voss (white spruce), *P. mariana* (Mill.) BSP. (black spruce), *P. pungens* Engelm. (Colorado blue spruce), *P. rubens* Sarg. (red spruce) and *Rhododendron* sp. General. 1913-W.P.F.

Chrysomyxa ledi (Alb. & Schw.) de Bary var. **cassandrae** (Pk. & Clint.) Savile *in* Can. J. Res., C., 28:324. 1950.
On *Chamaedaphne calyculata* (L.) Moench var. *angustifolia* (Ait.) Rehd. (leather leaf), *Picea glauca* (Moench.) Voss (white spruce), *P. mariana* (Mill.) BSP. (black spruce), *P. pungens* Engelm. (Colorado blue spruce) and *P. rubens* Sarg. (red spruce). General 1913-W.P.F.

Chrysomyxa ledi (Alb. & Schw.) de Bary var. **groenlandici** Savile *in* J. Bot. 33:490. 1955.
Melampsoropsis abietina Arth.
On *Picea rubens* Sarg. (red spruce). 1911-W.P.F. (Mycologia 3:69. 1911, and 4:178. 1912).

Chrysomyxa ledicola Lagerh. *in* Tromso Mus. Aarsh. 16:119. 1893.
On *Ledum groenlandicum* Oed. (Labrador tea), Picea glauca (Moench) Voss (white spruce), *P. mariana* (Mill.) BSP (black spruce), *P. pungens* Engelm. (Colorado blue spruce), *P. rubens* Sarg. (red spruce) and *Picea* sp. General. 1913-W.P.F.

Chrysomyxa pirolata Wint. *in* Rabenhorst, Kryptogamenfl., ed. 2, 1(1):259. 1882.
On *Picea glauca* (Moench) Voss (white spruce), *P. mariana* (Mill.) BSP. (black spruce), *P. rubens* Sarg. (red spruce), *Picea* spp. (cones), *Pyrola asarifolia* Michx. var. *purpurea* (Bunge) Fern. (pink wintergreen), *P. elliptica Nutt* (shin-leaf), *P. rotundifolia* L. var. *americana* (Sweet) Fern. (wintergreen) and *P. secunda* L. (one-sided wintergreen). 1913-W.P.F.

Chrysomyxa weirii Jacks. *in* Phytopathology 7:353. 1917.
On *Picea glauca* (Moench) Voss (white spruce) and *P. rubens* Sarg. (red spruce). Shelburne Co. 1950-L.E.W. (O-5520 coll. E.L.H. det. I.L.C.).

Chrysomyxa woronini Tranz. *in* Centralbl. Bakt. 2, 11:106. 1903.
On *Ledum groenlandicum* Oed. (Labrador tea), *L. palustre* var. *decumbens* Ait., *Ledum* sp., *Picea glauca* (Moench) Voss (white spruce) and *P. mariana* (Mill.) BSP. (black spruce). 1975-L.P.M., J.M.M.

Ciborina whetzelii (Seav.) Seav. *in* North Am. Cup-Fungi (Inoperculates):70. 1951.
Ciborina bifrons (Whetz.) Whetz.
Sclerotinia whetzelii Seav.
On *Populus tremuloides* Michz. (trembling aspen). Cumberland and Hants Co. 16 July 1933-K.A.H. (KM-637, 846 *in* DAOM) (DAOM 4517).

Cicinnobolus cesatii de Bary *in* Abh. Senckenb. Naturforsch. Ges. 7:431 (Beitr. Morphol. Phys. Pilze 3:71) 1870.
See *Ampelomyces quisqualis* Ces. ex Schlecht.

Cintractia caricis (Pers.) Magn. *in* Verh. Bot. Ver. Prov. Brandenb. 37:79. 1895.
On *Carex abdita* Bickn., *C. limosa* L., *C. nigra* (L.) Reich. and *C. salina* Wahl. (sedge grasses). Colchester and Kings Co. 10 May 1927-J.F.H., D.B.O.S. (1939-G.L.I.Z.).

Cintractia junci (Schw.) Trel. *in* Bull. Torrey Bot. Club 12:70. 1885.
On *Juncus tenuis* Willd. (rush). Pictou Co. 1950-L.E.W. (leg. W.P.F. det. I.H.C., no. 753).

Cintractia pratensis Syd. *in* Ann. Mycol. 22:289. 1924.
On *Carex exilis* Dewey (sedge). Lunenburg Co. 4 July 1942-D.W.C. (coll. A.E.R., W.G. Dore).

Cladosporium carpophilum Thüm. *in* Oesterr. Bot. Z., 27:12. 1877.
See stat. perf. *Venturia carpophila* Fisher.

***Cladosporium cladosporioides** (Fres.) de Vries *in* Contr. *Cladosporium*:57. 1952.
On *Malus pumila* Mill. (apple seedling) and from milled peat, *Sphagnum* sp. Kings Co. 1961-C.O.G.

Cladosporium cucumerinum Ell. & Arth. *in* Bull. Indiana Agric. Exp. Stn. 19:9. 1889.
Scab and fruit spot on *Cucumis sativus* L. (cucumber). General. 20 Aug. 1925-J.F.H.

Cladosporium fulvum Cke. *in* Grevillea 12:32. 1883.
See *Fulvia fulva* (Cke.) Cif.

Cladosporium graminum Cda. *in* Icon. Fung. 1:14, tab. 3, fig. 207. 1837.
On leaves of *Avena sativa* L. (oat). Lunenburg Co. 15 Aug. 1940-W.T., I.L.C.

Cladosporium herbarum (Pers.) Link *in* Mag. Ges. Naturforsch. Freunde, Berl., 7:37. 1815.
On *Cucurbita maxima* Duchesne (squash), *Malus pumila* Mill. (apple), *Pyrus communis* L. (pear), *Rhododendron* sp. and *Triticum aestivum* L. (wheat). General. 1913-A.H.M.

Cladosporium oxycocci Shear *in* Bull. Torrey Bot. Club, 24:306. 1897.
On *Vaccinium macrocarpon* Ait. (cranberry). Richmond Co. 1897-C.L.S.

★**Cladosporium pisicola** Snyder *in* Phytopathology 24:899. 1934.
Cladosporium cladosporioides (Fr.) de Vries f. *pisicola* (Snyd.) de Vries (1952).
On leaves of *Pisum sativum* L. (garden pea). Annapolis Co. 16 July 1970-C.O.G.

★**Clathridium corticola** (Fckl.) Shoem. & E. Müller *in* Can. J. Bot. 42:404. 1964.
Stat. conid. *Seimatosporium lichenicola* (Cda.) Shoem. and E. Müller.
On *Rhododendron* sp., *Rosa* sp. (rose), *Vaccinium angustifolium* Ait. (lowbush blueberry), *V. corymbosum* L. (highbush blueberry) and *Vitis vinifera* L. (grape). Digby and Kings Co. 11 June 1952-D.W.C., C.O.G. (DAOM 140134, 145896, 145901).

Claudopus depluens (Batsch) Gill. *in* Hymén Fr.:426. 1874.
In pasture. Halifax Co. 1881-J.S. (A.H.M.)

★**Clavaria acuta** Fr. *in* Syst. Mycol. 1:485. 1821.
Clavaria falcata Fr. (1821).
Clavaria fragalis Fr. sensu Rea.

Clavaria filipes Berk. & Rav.

Among *Marchantia* sp. and mosses on soil in pots of *Vaccinium* sp. in greenhouse (Acadia Univ.) Kings Co. 18 Apr. 1980-K.A.H.

Clavaria argillacea Fr. *in* Syst. Mycol. 1:482. 1821.

Clavaria subfalcata Atk.

On bare soil. Annapolis, Colchester and Kings Co. 4 Sept. 1931-L.E.W. (W-1469) (KM-640, 5021, 5022 *in* DAOM, K.A.H.).

Clavaria fumosa Fr. *in* Syst. Mycol. 1:483. 1821.

From Kings Co. 4 Aug. 1977-B.J.M. (B.J.M.-8, 11, 24, 54 *in* ACAD) (KM-618 *in* DAOM, K.A.H.).

Clavaria purpurea Fr. *in* Syst. Mycol. 1:480. 1821.

On soil under conifers. Colchester, Inverness, Kings and Victoria Co. 18 Aug. 1931-L.E.W. (W-1345, 1345a) (ACAD 5016, 5076 coll. K.A.H. det P.O.) (B.J.M.-27 *in* ACAD) (KM-4992, 5016-5020, 5076 *in* DAOM, K.A.H. det. P.O.)

Clavaria rosea Fr. *in* Syst. Mycol. 1:482. 1821.

From Kings Co. 4 Sept. 1932-K.A.H. (KM-637 *in* DAOM).

Clavaria vermicularis Fr. var. **vermicularis** *in* Syst. Mycol. 1:484. 1821.

On soil. Colchester, Lunenburg and Kings Co. 1913-A.H.M. (L.E.W.-1086, 1086a) (B.J.M.-5, 17 *in* ACAD) (KM-642, 643, 4987, 5024 *in* DAOM, K.A.H.).

Clavaria vermicularis Fr. var. **gracilis** Bourd. & Galz. *in* Hymén. Fr. 1:110. 1928.

On lawn. Kings Co. 13 Aug. 1954-K.A.H. (KM-5079 *in* DAOM det. P.O.)

Clavaria zollingeri Lév. *in* Ann. Sci. Nat. Bot., Sér. 3, 5:155. 1946, emended v. Ov., Bull. Jard. Bot. Buitenzorg, Ser. 3, 5:270. 1923.

Clavaria amethystina Zoll.

Clavaria lavendula Pk.

Clavulina amethystina (Fr.) Donk.

On soil in woods. Annapolis, Colchester, Halifax and Kings Co. 18 Aug. 1931-L.E.W. (W-1347 coll. A.H.S.) (KM-602-604, 1438, 5010, 5012-5015, 5078 *in* DAOM, K.A.H.) (B.J.M.-32 *in* ACAD).

Clavariadelphus cokeri Wells & Kempton *in* Mich. Bot. 7:46. 1968.

Clavariadelphus pistillaris (Fr.) Donk var. *americanus* Corner.

On soil under hardwoods. Colchester Co. 27 Aug. 1931-L.E.W. (W-1417, 1417a, coll. A.H.S. as *Clavaria pistillaris* L.) (KM-5046, 5048 coll. K.A.H., det. P.O. *in* DAOM).

Clavariadelphus fistulosus (Fr.) Corner *in* Monogr. of *Clavaria* and Allied Genera: 272. 1950.

See *Macrotyphula fistulosa* (Holmsk. ex Fr.) Petersen.

Clavariadelphus pistillaris (Fr.) Donk *in* Rev. Niederl. Homobas., Aphyll. 2:73. 1933.

Clavaria pistillaris (Fr.) Karst.

On soil in woods. Annapolis and Kings Co. 1913-A.H.M. (KM-633, 634, 946, 1445 *in* DAOM, K.A.H.) (B.J.M.-35 coll. K.A.H., 63, 67, 91 *in* ACAD). (DAOM 95904, 111226, K.A.H.).

Clavariadelphus sachalinensis (Imai) Corner *in* Monogr. of *Clavaria* and Allied Genera:282. 1950.

On moss under conifers. General. 1913-A.H.M. (KM-625, 626, 655, 1442, 5049, det. P.O. *in* DAOM, K.A.H.) (L.E.W.-1297, 1297a-c, coll. A.H.S.) (DAOM 95816, 95902, 111220, K.A.H.) Previously misidentified as *C. lingula* (Fr.) Donk.

Claviceps microcephala (Wallr.) Tul. *in* Ann. Sci. Nat. Bot., Sér. 3, 20, tab. 4, fig. 1-11. 1853.

On *Phleum pratense* L. (timothy). Kings Co. 4 Sept. 1928-J.F.H.

Claviceps nigricans Tul. *in* Ann. Sci. Nat. Bot., Sér. 3, 20:51. 1853.
On *Eleocharis acicularis* (L.) R. & S. (spike rush). Queens Co. 1950-L.E.W. (DAOM 5942 coll. J.A. det. I.L.C.)

Claviceps purpurea (Fr.) Tul. *in* Ann. Sci. Nat. Bot., Sér. 3, 20:45. 1853.
Ergot disease on *Agropyron repens* (L.) Beauv. (couchgrass), *Alopecurus aequalis* Sobol. (meadow foxtail), *Agrostis alba* L. (red top), *Calamagrostis canadensis* (Michx.) Beauv. (blue joint), *Hordeum vulgare* L. (barley), *Phleum pratense* L. (timothy), *Secale cereale* L. (rye), *Triticum aestivum* L. (wheat) and *Zizania aquatica* L. (wild rice). General. 1913-A.H.M. (DAOM 2633, 5091, 5145) (L.E.W.-1440, sclerotia only).

Claviceps zizaniae (Fyles) Pantidou *in* Can. J. Bot. 37:1234. 1959.
On *Zizania acquatica* L. (wild rice). Cumberland Co. 1938-H.T.G., J.M.S.

Clavicorona pyxidata (Fr.) Doty *in* Lloydia 10:38. 1947.
Clavaria pyxidata (Pers.) Fr.
On decayed logs, especially *Populus* sp. (poplar) and *Salix* sp. (willow), Colchester and Kings Co. 1928-K.A.H. (KM-635, 636, 652, 660, 1446, 5057 det. R.H.P. *in* DAOM) (L.E.W.-87) (ACAD 11875) (B.J.M.-7, 9 *in* ACAD).

Clavulina castaneopes (Atk.) Corner var. **castaneopes** *in* Ann. Bot. Mem. 1:306. 1950. (Mycologia 56:24. 1964).
Clavaria ornatipes Pk.
Clavulina ornatipes (Pk.) Corner.
Lachnocladium ornatipes (Pk.) Burt.
On soil. Inverness and Kings Co. 5 Aug. 1931-L.E.W. (W-1218) (KM-632, 935, 5034 *in* DAOM, K.A.H., det. P.O.)

Clavulina cinerea (Fr.) Schroet *in* Cohn, Krypt. Fl. Schles, Pilze:442. 1888.
Clavaria cinerea Bull.
On soil from Colchester, Hants, Kings, Lunenburg, Pictou and Shelburne Co. 1908-A.H.M. (L.E.W.-73, 249, 1131) (B.J.M.-48, 80, 111, 159 *in* ACAD) (KM-1560, 4166, 5059-5071 *in* DAOM, K.A.H.).

Clavulina cristata (Fr.) Schroet. *in* Cohn, Krypt. Fl. Schles, Pilze:442. 1888.
Clavaria cristata (Holmsk.) Pers.
On soil in fields and woods. Annapolis, Hants, Kings, Richmond and Victoria Co. 1908-A.H.M. (KM-612-614, 5028, 5032, 5072, *in* DAOM, K.A.H.) (L.E.W.-593, 593a,b) (B.J.M.-36, 39, 83, 161, coll. K.A.H., *in* ACAD).

Clavulina herveyi (Pk.) Petersen *in* Mycologia 59:42. 1967.
Clavaria herveyi Pk.
From Kings Co. 28 Sept. 1953-K.A.H. (KM-5007 *in* DAOM, det. R.H.P.).

Clavulina rugosa (Fr.) Schroet. *in* Cohn, Krypt. Fl. Schles., Pilze:442. 1888.
Clavaria rugosa (Bull.) Fr.
On soil in woods and pastures. Colchester and Kings Co. 1881-J.S. (A.H.M.) (L.E.W.-1306, 1306a) (KM-5073, *in* DAOM, K.A.H.).

Clavulinopsis appalachiensis (Coker) Corner *in* Monogr. of *Clavaria* and Allied Genera:355. 1950.
Clavaria appalachiensis Coker.
From Kings Co. 1932-K.A.H. (KM-653 *in* DAOM).

Clavulinopsis aurantio-cinnabarina (Schw.) Corner var. **aurantio-cinnabarina** *in* Monogr. of *Clavaria* and Allied Genera:358. 1950.
Clavaria aurantio-cinnabarina Schw.
On soil in mixed woods. Colchester and Kings Co. 21 Aug. 1931-L.E.W. (W-1360a) (B.J.M.-126, 134 *in* ACAD).

Clavulinopsis aurantio-cinnabarina (Schw.) Corner f. **amoena** (Zoll. & Mor.) Petersen *in* Mycologia Mem. no. 2:25. 1968.

Clavaria amoena Zoll. & Mor.
Clavulinopsis amoena (Zoll. & Mor.) Corner.
On soil. Kings Co. 29 June 1977-B.J.M. (B.J.M.-150 *in* ACAD).

Clavulinopsis corniculata (Fr.) Corner *in* Monogr. of *Clavaria* and Allied Genera:362. 1950.
Clavaria protensis Fr.
Clavaria muscoides (L.) Fr.
Ramariopsis corniculata (Fr.) Petersen (Mycologia 70:668. 1978).
On soil or duff in mixed woods. Annapolis, Colchester and Kings Co. 19 Aug. 1931-L.E.W. (W-1363, 1388) (KM-628, 629, 944, 1619, 4989, 4991, 5009 *in* DAOM, K.A.H.) (ACAD 4991, K.A.H.) (B.J.M.-155 *in* ACAD).

Clavulinopsis fusiformis (Fr.) Corner *in* Monogr. of *Clavaria* and Allied Genera:367. 1950.
Clavaria fusiformis Sow. ex Fr.
Ramariopsis fusiformis (Sow. ex Fr.) Petersen (Mycologia 70:668. 1978).
On soil among grass in fields and woods. Annapolis, Colchester, Guysborough, Halifax, Hants, Kings and Shelburne Co. 1913-A.H.M. (L.E.W.-1158, coll. A.R.P., 1132 coll. A.H.S., 1132a-d, 6213, 6254) (KM-622, 623, 967, 1439, 1440, 5005, 5008, 5035, 5104, 5107 *in* DAOM, K.A.H.) (B.J.M. 2, 49, 89 *in* ACAD).

Clavulinopsis gracillima (Pk.) Petersen *in* Mycol. Mem. 2:30. 1968.
Clavaria gracillima Pk.
Clavulinopsis luteo-alba (Rea) Corner.
On decayed wood. Colchester and Kings Co. 14 Aug. 1931-L.E.W. (W-1305, 1305a,b) (KM-605, 619, 5102 *in* DAOM, K.A.H.) (B.J.M.-139 *in* ACAD coll. K.A.H.).

Clavulinopsis helvola (Fr.) Corner *in* Monogr. of *Clavaria* and Allied Genera:372. 1950.
Ramariopsis helvola (Pers. ex Fr.) Petersen (Mycologia 70:669. 1978).
In woods of *Pinus* sp. (pine). Kings Co. 1881-J.S. (KM-5006 *in* DAOM, K.A.H. det. R.H.P.)

Clavulinopsis laeticolor (Berk. & Curt.) Petersen *in* Mycologia 57:522. 1965.
Clavaria pulchra Pk.
Clavulinopsis pulchra (Pk.) Corner.
Ramariopsis laeticolor (Berk. & Curt.) Petersen (Mycologia 70:668. 1978).
On soil in mixed woods. Annapolis, Colchester, Guysborough, Halifax and Kings Co. 1908-A.H.M. (L.E.W.-1312, 1312a) (ACAD 5030, K.A.H.) (B.J.M.-154, 157 *in* ACAD) (KM-650, 4996, 5001, 5025, 5030 *in* DAOM, K.A.H.).

Clavulinopsis luteo-alba (Rea) Corner *in* Monogr. of *Clavaria* and Allied Genera: 374. 1950.
See *Clavulinopsis gracillima* (Pk.) Petersen.

Clavulinopsis tenuicula (Bourd. et Galz.) Corner *in* Monogr. of *Clavaria* and Allied Genera:392. 1950.
Clavaria subtilis Pers. sensu Wehm. (Pap. Mich. Acad. Sci. Arts Lett. 20:257. 1935).
Ramariopsis tenuicula (Bourd. & Galz.) Petersen (Mycologia 70:669. 1978).
On soil in mixed woods. Annapolis and Colchester Co. 21 Aug. 1931-L.E.W. (W-1379, 1379a) (KM-5011 *in* DAOM, K.A.H. det. R.H.P.).

Clavulinopsis umbrinella (Sacc.) Corner *in* Ann. Bot. Mem. 1:393-394. 1950.
Clavaria cineroides Atk.
Clavaria umbrina Berk.
Clavaria umbrinella Sacc.
Clavulinopsis cineroides (Atk.) Corner.

Ramariopsis umbrinella (Sacc.) Peterson (Mycologia 70:668. 1978).
On grounds in woods. Guysborough, Hants and Kings Co. 21 Aug. 1932-K.A.H. (ACAD 609) (IM-609, 610, 1989 *in* DAOM) (B.J.M.-118, 610 *in* ACAD).

Climacocystis borealis (Fr.) Kotl. & Pouz. *in* Česká Mykol. 12:95. 1958.
Polyporus borealis Fr.
Spongipellus borealis (Fr.) Pat.
Tyromyces borealis (Fr.) Imaz.
On *Picea rubens* Sarg. (red spruce), *Picea* sp. and *Tsuga canadensis* (L.) Carr. (hemlock). Colchester, Digby, Kings, Pictou and Queens Co. 1908-A.H.M. (L.E.W.-1324, 1324a coll. A.H.S. det. J.L.L.) (KM-4186, 4187, 4188 *in* DAOM, K.A.H.) (WS-138-231 *in* ACAD).

Climacodon septentrionalis (Fr.) Karst. *in* Rev. Mycol. 3:20. 1881
Hydnum septentrionale Fr.
Steccherinum septentrionale (Fr.) Banker (basionym).
On *Acer* sp. (maple). Colchester, Kings and Victoria Co. 1953-J.W.G. (KM-4608, 4897 in DAOM, K.A.H.).

Clitocybe bella (Pers.) Gill. *in* Hymén Fr. 1874; Syll. Fung. 19:336. 1910, and 5:200. 1887.
Clitocybe bella Pers. Gill. *in syn.* Fung.:452 (Agar.) 1801. (a modern description lacking, fide Dennis, Orton & Hora, T.B.M.S. 1960).
Under *Pinus* sp. (pine). Halifax Co. 1881-J.S. (A.H.M.)

Clitocybe candicans (Pers. ex Fr.) Kummer *in* Führ. in Pilzkd.:46. 1882.
On lawns and grassy areas. Annapolis and Kings Co. 3 Nov. 1953-K.A.H. (KM-4632-4634, 4636, 4639, 4640 *in* DAOM).

Clitocybe clavipes (Pers. ex Fr.) Kummer *in* Führ in Pilzkd.:124. 1871.
Reported from Annapolis, Kings and Shelburne Co. 1908-A.H.M. (KM-193, 1475, 2568 *in* DAOM, K.A.H.) (DAOM 39219).

★**Clitocybe dealbata** (Sow. ex Fr.) Kummer *in* Führ. in Pilzkd.:46. 1882.
On lawn. Kings Co. 22 Sept. 1953-K.A.H. (KM-2564 *in* DAOM, conf. H.E.B.).

Clitocybe epichysium (Fr.) Bigelow *in* Mycologia 50:40. 1958.
Omphalina epichysium (Fr.) Quél. (1886).
On *Fagus grandifolia* Ehrh. (beech). Colchester Co. 10 Aug. 1931-A.H.S., L.E.W. (W-729, 729a, 600).

Clitocybe flaccida (Sow. ex Fr.) Kummer *in* Führ. in Pilzkd.:44. 1882.
Reported from Halifax Co. 1881-J.S.

Clitocybe gerardiana (Pk.) Sacc. *in* Syll. Fung. 5:181. 1887.
Omphalina gerardiana (Pk.) Sing. (1951).
On moss. Colchester Co. 30 June 1931-A.H.S., L.E.W. (W-533).

Clitocybe gilva (Pers. ex Fr.) Kummer *in* Führ. in Pilzkd.:45. 1882.
Under *Abies* sp. (fir) and *Picea* sp. (spruce). Colchester and Kings Co. 28 Oct. 1933-K.A.H. (KM-197 *in* ACAD conf. H.E.B.) (L.E.W.-764) (KM-197 *in* DAOM).

Clitocybe leptoloma (Pk.) Pk. *in* Annu. Rep. N.Y. State Mus. 157:68. 1912.
At base of stub of *Fagus grandifolia* Ehrh. (beech). Colchester Co. 18 Aug. 1931-A.H.S., L.E.W. (W-787).

Clitocybe morgani (Pk.) Bigelow *in* Bigelow & Barr, Rhodora 64:126-137. 1962.
See *Hygrophoropsis morgani* (Pk.) Bigelow.

Clitocybe nebularis (Batsch ex Fr.) Kummer *in* Führ. in Pilzkd.:124. 1871.
From Lunenburg and Shelburne Co. 1908-A.H.M.

Clitocybe odora (Fr.) Kummer var. **odora** *in* Führ. in Pilzkd.:121. 1871.
Clitocybe odora var. *anisearea* Pk.
Under *Picea* sp. (spruce). Colchester, Kings and Victoria Co. 18 July 1831-A.H.S., L.E.W. (W-653) (KM-209, 537, 548, 2561, 2562, 4644, 5284, *in* DAOM, K.A.H.).

Clitocybe robusta Pk. *in* Annu. Rep. N.Y. State Mus. 49:17. 1896.
Clitocybe candicans (Fr.) Quél.
Clitocybe alba (Bat.) Sing.
On humus in open hardwoods or under conifers. Lunenburg and Pictou Co. 1881-J.S. (KM-898 *in* DAOM, K.A.H.).

Clitocybe sinopica (Fr.) Kummer *in* Führ. in Pilzkd.:123. 1871.
Agaricus sinopicus Fr.
Usually on sandy soil, rarely on wood. Kings Co. 1 Nov. 1931-K.A.H. (KM-214, 4647 det. H.E.B., 5142) (DAOM 2559, 2569).

Clitocybe squamulosa (Fr.) Kummer var. **squamulosa** *in* Führ. in Pilzkd.:123. 1871. (Lloydia 31:51. 1968).
Usually on moss and needles under conifers. Cumberland, Kings and Victoria Co. 18 July 1930-K.A.H. (KM-199, 200, 211 conf. H.E.B., 2566, 2567, 3986-3988 *in* DAOM).

Clitocybe subditopoda Pk. *in* Annu. Rep. N.Y. State Mus. 42:18. 1889.
From Kings Co. 29 Nov. 1952-K.A.H. (KM-4649a det. H.E.B. *in* DAOM).

Clitocybula familia (Pk.) Sing. *in* Sydowia 15:53. 1961.
Collybia familia (Pk.) Sacc.
On moss covered log. Colchester Co. 21 Aug. 1931-A.H.S., L.E.W. (W-800) (MICH Smith 800).

★**Clitocybula lacerata** (Scop. per Pollini) Metrod. *in* Rev. Mycol. 17:87. 1952.
Agaricus laceratus Scop. per Pollini.
On stump of *Tsuga* sp. (hemlock). Kings Co. 4 Sept. 1968-K.A.H. (MICH 7854).

Clitopilus albogriseus Pk. *in* Annu. Rep. N.Y. State Mus. 31:33. 1879.
See *Entoloma albogriseus* (Pk.) Redhead.

Clitopilus caespitosus Pk. *in* Annu. Rep. N.Y. State Mus. 41:65. 1888.
From Kings Co. 26 Sept. 1938-K.A.H. (KM-896, 915 *in* DAOM, fide A.H.S.).

Clitopilus micropus (Pk.) Sacc. *in* Syll. Fung. 5:705. 1887.
From Annapolis Co. 1913-A.H.M.

Clitopilus prunulus (Scop. ex Fr.) Kummer *in* Führ. in Pilzkd.:68. 1882.
Clitopilus orcellus (Bull. ex Fr.) Kummer.
Under conifers in pastures and open places. Colchester, Halifax and Kings Co. 1881-J.S. (L.E.W.-580, 580a, 774) (KM-4102 *in* DAOM, K.A.H.).

Coccomyces cembrae Rehm *in* Hedwigia 24:232. 1885.
On *Larix laricina* (DuRoi) Koch (tamarack). Colchester Co. 13 July 1931-L.E.W. (W-1004).

Coccomyces coronatus (Schum. ex Fr.) de Not. var. **coronatus** *in* Erbar. Critt. Ital. 1:236. 1859.
Lophodermium tumidum (Fr.) Rehm.
On leaves of *Acer* sp. (maple), *Fagus* sp. (beech), *Populus* sp. (poplar) and petioles of *Sorbus americana* Marsh. (mountain ash). Colchester Co. 3 Sept. 1921-L.E.W. (W-1467, 1537).

Coccomyces coronatus (Schum. ex Fr.) de Not. var. **trigonus** (Fr.) Karst. *in* Mycol. Fenn. 1:257. 1871.
On *Acer* sp. (maple) and *Fagus* sp. (beech). Colchester Co. 1 Aug. 1931-L.E.W. (W-1198, 1277).

Coccomyces hiemalis Higgins *in* Science (N.S.) 37:638. 1913.
On *Prunus avium* L. (sweet cherry), *P. pensylvanica* L.f. (pin cherry) and *P. serotina* Ehrh. (black cherry). Annapolis, Kings and Digby Co. 3 Aug. 1925-J.F.H.

Coccomyces lutescens Higgins *in* Am. J. Bot. 1:165. 1914.
On leaves of *Prunus virginiana* L. (chokecherry), *Prunus serotina* Ehrh. (wild black cherry) and *Prunus mahaleb* L. (mahaleb cherry), Kings and Queens Co. 10 Aug. 1948-J.F.H.

Coccomyces pini (Alb. & Schw.) Karst. *in* Bidr. Finl. Nat. Folk (Mycol Fenn. (1)19:254. 1871.
Coccophacidium pini (Fr.) Rehm.
Therrya pini (Alb. & Schw.) Höhn.
On dead stems of *Pinus strobus* L. (white pine). Colchester Co. 30 Aug. 1933-L.E.W. (W-1647).

★**Coccomyces prunophorae** Higgins *in* Am. J. Bot. 1:165. 1914.
Stat. conid. *Cylindrosporium prunophorae* Higgins.
On leaves of *Prunus* sp. (plum). Victoria Co. 21 Aug. 1972-R.W.D., C.O.G.

Coccomyces strobi Reid & Cain *in* Can. J. Bot. 39:1127. 1961.
Coccophacidium pini (Fr.) Rehm.
On *Pinus strobus* L. (white pine). Colchester and Kings Co. 30 Aug. 1933-L.E.W. (W-1647 as *C. pini)* (DAOM 29511 as *Coccophacidium crustaceum* (Curt.) Durand nom. nud.)

Cochliobolus sativus (Ito & Kurib.) Drechsler ex Dastur *in* Indian J. Agric. Sci. 12:733. 1942.
See stat. conid. *Bipolaris sorokiniana* (Sacc. in Sorok.) Shoem.

Cochliobolus victoriae Nelson *in* Phytopathology 50:774. 1960.
See stat. conid *Bipolaris victoriae* (Meehan & Murphy) Shoem.

Coleosporium asterum (Diet.) Syd. *in* Ann. Mycol. 12:109. 1914.
Coleosporium solidaginis Thüm.
On *Aster cordifolius* L. (heart-leaved aster), *A. lateriflorus* (L.) Britt. (wireweed), *A. macrophyllus* L. (large-leaved aster), *A. novi-belgii* L. (N.Y. aster), *A. patens* Ait., *A. umbellatus* Mill. (tall white aster), *Callistephus* sp. (China aster), *Pinus banksiana* Lamb. (jack pine), *P. resinosa* Ait. (red pine), *P. sylvestris* L. (Scots pine), *Solidago bicolor* L. (white goldenrod), *S. canadensis* L. (Canada goldenrod), *S. gigantea* Ait. var. *leiophylla* Fern., *S. juncea* Ait. (early goldenrod) and *S. rugosa* Mill. (rough goldenrod). General. 1913-W.P.F.

Coleosporium campanulae (Pers.) Lév. *in* Ann. Sci. Nat. Bot., Sér. 3, 8:375. 1847.
On *Campanula rapunculoides* L. (bellflower). Annapolis, Hants and Inverness Co. 18 Sept. 1936-A.E.R. (O-4944 coll. A.E.R.).

Coleosporium solidaginis (Schw.) Thüm. *in* Bull. Torrey Bot. Club 6:216. 1878.
On *Solidago sempervirens* L. (seaside goldenrod). Pictou Co. 1956-D.B.O.S.

Coleosporium viburni Arth. *in* Bull. Iowa Agric. Coll. Dep. Bot. 1884:163. 1884.
On *Pinus banksiana* Lamb. (jack pine) and *Viburnum cassinoides* L. (witherod). Cumberland, Guysborough and Kings Counties. 29 Aug. 1935-J.F.H. (O-2982).

Coleroa robertiana (Fr.) E. Müller *in* Müller & von Arx, Beitr. Kryptogamenfl. Schweiz 11(2):416. 1962.
Dothidea robertiana Fr.
On leaves of *Geranium robertianum* L. (Herb-Robert). Inverness Co. 16 Aug. 1956-D.B.O.S. (DAOM 43043).

Coleroa rubicola (Ell. & Ev.) E. Müller *in* Müller & v. Arx. Beitr. Kryptogamenfl. Schweiz 11(2):415. 1962.
Asterina rubicola Ell. & Ev.
On *Rubus idaeus* L. var. *strigosus* (Michx.) Maxim. (raspberry). Kings Co. 25 July 1937-I.L.C. (DAOM 4073, 35598).

★**Colletotrichum antirrhini** F.C. Stewart *in* Bull. N.Y. (Geneva) Agric. Exp. St. 179:105-114. 1900.
On *Antirrhinum majus* L. (snapdragon). Kings Co. 16 Sept. 1959-K.A.H.

Colletotrichum circinans (Berk.) Vogl. *in* Ann. R. Accad. Agric. Torino 49:175. 1907.
Colletotrichum dematium f. *circinans* (Berk.) v. Arx.
On *Allium* sp. (onion). Kings Co. April 1932-K.A.H.

Colletotrichum coccodes (Wallr.) Hughes *in* Can. J. Bot. 36:754. 1958.
Colletotrichum atramentarium (Berk. & Br.) Taub.
On *Cucurbita* spp. (squash), *Lycopersicon esculentum* Mill. (tomato), *Pisum* sp. (pea) and Solanum tuberosum L. (potato). Kings Co. 16 Sept. 1942-J.F.H.

Colletotrichum dematium (Pers. ex. Fr.) Grove *in* J. Bot. Lond. 56:341. 1918.
Vermicularia liliacearum Westend.
On *Beta vulgaris* L. (beet), *Fragaria* sp. (cultivated strawberry), *Lilium* sp. (lily), *Phlox* sp., *Rudbeckia laciniata* var. *hortensis* Bailey (coneflower), *Rubus idaeus* L. (red raspberry) and *Vaccinium macrocarpon* Ait. (cranberry). Colchester, Cumberland, Inverness and Kings Co. Sept. 1929-L.E.W. (W-280).

★**Colletotrichum destructivum** O'Gara *in* Mycologia 7:37. 1915.
On *Medicago sativa* L. (alfalfa). Kings Co. 8 June 1978-C.O.G. coll. R.W.D.

Colletotrichum erumpens Sacc. *in* Michelia 2:98. 1880.
On *Rheum rhaponticum* L. (garden rhubarb). Kings Co. 1 Aug. 1939-K.A.H.

★**Colletotrichum fructus** (F.L. Stev. & J.G. Hall) Sacc. *in* Syll. Fung. 22:1201. 1913.
On *Malus* sp. (crabapple). Kings Co. 4 Aug. 1958-J.F.H.

Colletotrichum gloeosporioides Penz. *in* Fung. Agrum. 2:6. 1882.
Colletotrichum fructigenum (Berk.) Vass.
Gloeosporium fructigenum Berk.
See stat. perf. *Glomerella cingulata* (Stonem.) Spauld. & Schrenk.

Colletotrichum graminicola (Ces.) G.W. Wilson *in* Phytopathology 4:110. 1914.
On *Digitaria* sp. (crabgrass). Kings Co. 17 Sept. 1942-J.F.H.

Colletotrichum lindemuthianum (Sacc. & Magn.) Bri. & Cav. *in* Funghi Par. della Planti Cult. 50. 1889.
On *Phaseolus* sp. (beans). General. 3 Aug. 1925-J.F.H.

Colletotrichum malvarum (Braun & Casp.) Southw. *in* J. Mycol. 6:116. 1890.
On *Althaea rosea* (L.) Cav. (hollyhock). Kings Co. 27 Feb. 1951-D.W.C.

Colletotrichum orbiculare (Berk. & Mont.) v. Arx. *in* Phytopathol. Z. 29:112. 1957.
Colletotrichum lagenarium (Pass.) Ell. & Halst.
On *Citrullus vulgaris* Schrad. (watermelon), *Cucumis* spp. (cucumber) and *Cucurbita* spp. (squash). General. 8 Aug. 1929-J.F.H.

★**Colletotrichum pisi** Pat. *in* Bull. Soc. Mycol. Fr. 7:180. 1891.
Colletotrichum gloesporioides Penz.
On leaves of *Pisum sativum* L. (garden pea). Annapolis Co. 16 July 1970-C.O.G.

★**Colletotrichum solitarium** Ell. & Barth. *in* Bull. Torrey Bot. Club:467. 1897.
On *Solidago* sp. (goldenrod). Kings Co. 27 Feb. 1951-C.L.L., D.W.C.

Colletotrichum truncatum (Schw.) Andrus & Moore *in* Phytopathology 25:121. 1935.
Colletotrichum dematium (Pers. ex Fr.) Grove f. *truncatum* (Schw.) v. Arx (as *truncata).*
Colletotrichum viciae Dearn. & Overh.
On leaves of *Vicia villosa* Roth (hairy or winter vetch). Kings Co. 19 Nov. 1951-D.W.C., I.L.C.

Colletotrichum violae-tricoloris R.E. Smith *in* Bot. Gaz. 27:203. 1899.
On *Viola tricolor* L. (pansy). Lunenburg Co. July 1935-J.F.H.

Collybia acervata (Fr.) Kummer *in* Führ. in Pilzkd.:114. 1871.
Under mixed woods. Colchester, Halifax and Lunenburg Co. 1913-A.H.M. (L.E.W.-828) (KM-2587, 4146 *in* DAOM, K.A.H.).

Collybia alcalinolens Pk. *in* Bull. N.Y. State Mus. 2:6. 1887.
On ground among leaves in rich frondose woods. Colchester Co. 26 July 1929-A.H.S., L.E.W. (W-128) (Probably a species of *Tricholoma* fide R.E.H.).

Collybia butyracea (Bull. ex Fr.) Kummer *in* Führ in Pilzkd.:117. 1871.
Rhodocollybia butyracea (Bull. ex Fr.) Lennox (1979).
Under conifer woods. Annapolis, Colchester, Guysborough and Kings Co. 1913-A.H.M. (L.E.W.-666) (KM-220-224, 767, 867, 868, 4147 *in* DAOM, K.A.H.).

Collybia cirrhata (Pers. ex Pers.) Quél *in* Mém. Soc. Emul. Montbeliard, Sér. 2(5):96. 1872.
Microcollybia cirrhata (Pers. ex Pers.) Lennox (1979).
On decaying pilei of agarics and boletes. Hants and Kings Co. 6 Aug. 1931-K.A.H. (KM-226 fide A.H.S., 860, 1099 *in* DAOM).

Collybia clusilis Fr. *in* Epicr. Syst. Mycol.:98. 1838.
Collybia clusilis (Fr.) Gill. sensu Konr. & Josserand (Singer, 1951).
In sphagnum moss bog. Colchester Co. 27 June 1931-A.H.S., L.E.W. (Poorly understood and imperfectly known, even in Europe, R.E.H.) (Report probably based on *Lyophyllum palustre* (Pk.) Sing. which normally occurs on *Sphagnum,* fide S. Redhead).

Collybia confluens (Pers. ex Fr.) Kummer *in* Führ in Pilzkd.:117. 1871.
In mixed woods. Cape Breton, Colchester, Cumberland, Hants and Kings Co. 12 July 1931-K.A.H. (KM-227, 229, 2705, 5400 and others *in* DAOM) (L.E.W.-665).

Collybia cookei (Bres.) J.D. Arnold *in* Mycologia 27:413. 1935.
Collybia cirrhatus var. *cookei* Bres.
From Hants and Kings Co. 16 Sept. 1930-K.A.H. (KM-225, 859, 861 fide A.H.S., *in* DAOM).

Collybia dryophila (Bull. ex Fr.) Kummer *in* Führ. in Pilzkd.:115. 1871.
On *Abies balsamea* (L.) Mill. (balsam fir) and on sphagnum and decaying leaves under hardwoods. Colchester, Cumberland, Guysborough, Hants, Kings and Victoria Co. 1880-J.S. (A.H.M.) (KM-231, 232, 4148, 4149 *in* DAOM, K.A.H.) (L.E.W.-512) (ACAD 13661).

Collybia lacunosa Pk. *in* Annu. Rep. N.Y. State Mus. 44:64. 1891.
See *Cyptotrama asprata* (Berk.) Redhead & Ginns.

Collybia maculata (Alb. & Schw. ex Fr.) Kummer *in* Führ. in Pilzkd.:117. 1871.
Rhodocollybia maculata (Fr.) Sing. (1939).
From Cape Breton and Kings Co. 14 Sept. 1931-K.A.H. (KM-238, 965 fide A.H.S., 4150, 4151 *in* DAOM).

Collybia myriadophylla Pk. *in* Annu. Rep. N.Y. State Mus. 25:75. 1873.
See *Baeospora myriadophylla* (Pk.) Sing.

Collybia peronata (Bolt. ex Fr.) Kummer *in* Führ. in Pilzkd.:116. 1871.
Marasmius peronatus Bolt. ex Fr.
Halifax Co. 1888-J.S. (A.H.M.) Apparently does not occur in North America. Most N.A. authors applied this name to *C. subnuda* (Ellis ex Pk.) Gilliam, Mycotaxon 4:136. 1976 fide R.E.H.

Collybia platyphylla (Pers. ex Fr.) Kummer *in* Führ. in Pilzkd.:117. 1871.
See *Tricholomopsis platyphylla* (Pers. ex Fr.) Sing.

Collybia tuberosa (Bull. ex Fr.) Kummer *in* Führ. in Pilzkd.:116. 1871.
Microcollybia tuberosa (Bull. ex Fr.) Lennox (1979).
On old decayed caps of fleshy fungi. Colchester, Halifax, Hants and Kings Co. 29 July 1931-K.A.H. (KM-243, 244, 869, 1257 *in* DAOM) (L.E.W.-748).

Coltricia cinnamomea (Jacq. ex Fr.) Murr. *in* Bull. Torrey Bot. Club 31:343. 1904.
Polyporus cinnamomeus (Jacq.) Fr.

On soil. Annapolis, Inverness and Lunenburg Co. 1908-A.H.M. (L.E.W.-245a) (MICH 14371, K.A.H.).

★**Coltricia montagnei** (Fr. ex Mont.) Murr. *in* Mycologia 12:13. 1920.
Coltricia obesa (Ell. & Ev.) Murr. (1904).
Coltricia memmingeri Murr. (1904).
Polyporus montagnei Fr. apud Mont.
From Kings and Queens Co. 12 Aug. 1979-K.A.H. (MICH 13074, 14374).

Coltricia perennis (L. ex Fr.) Mich. ex. S.F. Gray *in* Nat. Arr. Br. Pl. 1:644. 1821.
Polyporus perennis L. ex Fr.
Polystictus perennis Fr.
On *Abies balsamea* (L.) Mill. (balsam fir), *Prunus pensylvanica* L.f. (pin cherry) and on soil. Annapolis, Colchester, Guysborough and Kings Co. 1881-J.S. (L.E.W.-245, 1509) (KM-1a, 2, 2a, 778, 779, 811-813, 2148 *in* DAOM, K.A.H.) (O-F2222, 2228, 3083, 4190).

Columnocystis abietinum (Pers. ex Fr.) Pouz. *in* Česká Mykol. 13(1):12. 1959.
Stereum abietinum (Pers. ex Fr.) Fr.
On wood and bark of *Abies balsamea* (L.) Mill. (balsam fir) and other conifers. Colchester Co. 19 Aug. 1933-L.E.W. (W-1761, 1761a det. M.A.D., H.S.J. as *S. abietinum*).

Comatricha nigra (Pers.) Schroet. *in* Cohn, Kryptogamenfl. Schles. 3(1):118. 1885.
On *Abies balsamea* (L.) Mill. (balsam fir) and other conifers. Pictou Co. 1913-C.L.M.

Comatricha subcaespitosa Pk. *in* Annu. Rep. N.Y. State Mus. 43:25. 1890.
On decayed wood. Colchester Co. 14 July 1931-L.E.W. (W-1029).

Comatricha typhoides (Bull.) Rostaf. *in* Lister, Monogr. Mycetozoa:120. 1894.
On decayed wood. Colchester and Pictou Co. 1906-C.L.M. (L.E.W.-393, 479).

★**Coniochaeta xylariaespora** (Cke. & Ell.) Cke. *in* Grevillea 16:16. 1887.
Rosellinia xylariispora (Cke. & Ell.) Sacc.
From fruit of *Vaccinium vitis-idaea* L. var. *minus* Lodd. (foxberry). Isolated at Kentville from fruit collected at Pouch Cove, Newfoundland. 12 Sept. 1977-D.L. Hawskworth, C.O.G., I.V.H. (DAOM 166744) (I.M.I. 242589).

Coniophora arida (Fr.) Karst. *in* Bidr. Finl. Nat. Folk 37:161. 1882.
On coniferous wood. 1975-L.P.M., J.M.M.

Coniophora fusispora (Cke. & Ell.) Cke. *in* Grevillea 8:89. 1880.
On *Picea* sp. (spruce). Colchester Co. 20 Aug. 1935-L.E.W. (W-1796 det. H.S.J.).

Coniophora olivacea (Fr.) Karst. *in* Bidr. Finl. Nat. Folk 37:162. 1882.
On deciduous wood. Kings Co. 22 Oct. 1953-K.A.H. (KM-3066 *in* DAOM det. Joan Spiers).

Coniophora puteana (Schum. ex Fr.) Karst *in* Not. Sällsk. Fauna Flora Fenn. 6:370. 1861.
On *Abies balsamea* (L.) Mill. (balsam fir), *Fagus grandifolia* (Ehrh. (beech), *Quercus* sp. (oak) and other deciduous wood. Kings Co. 9 Nov. 1953-K.A.H. (KM-2813 det. Joan Hanson, 2815, 3079 *in* DAOM).

Coniophora suffocata (Pk.) Massee *in* J. Linn. Soc. London. Bot. 25:138. 1889.
On *Abies* sp. (fir) and other coniferous wood. Colchester Co. 1950-L.E.W. (W-1768a, 1786b as *C. betulae* (Schum.) Karst.).

Coniothyrium concentricum (Desm.) Sacc. *in* Michelia 1:204. 1878.
On *Yucca smalliana* Fern. (Adam's-needle). Kings Co. 6 May 1931-J.F.H., K.A.H.

Coniothyrium fuckelii Sacc. *in* Fung. Ven. Novi vel Critici, Sér. 5:200. 1876; Michelia 1:270. 1878.
See stat. perf. *Leptosphaeria coniothyrium* (Fckl.) Sacc.

★ **Coniothyrium glomerulatum** Sacc. *in* Michelia 1:209. 1878.
On twigs on *Thuja occidentalis* L. (American arbor-vitae). Hants Co. 6 June 1975-C.O.G., J.B. (DAOM 151428, 151429).

Coniothyrium olivaceum Bon. apud Fckl. *in* Symb. Mycol.:377. 1869-1870.
Microsphaeropsis olivaceum (Bon.) Höhn.
On fruit of *Malus pumila* Mill. (apple) and *Vaccinium macrocarpon* Ait. (cranberry). Kings and Inverness Co. 21 Jan. 1970-C.O.G., K.A.H., J.B. (DAOM 142228, 167393).

Coniothyrium sp.
On *Pinus thunbergii* Parl. (Japanese black pine). 1975-L.P.M., J.M.M.

★ **Conocybe crispa** (Longyear) Sing. *in* Lilloa 22:485. 1951.
Galera crispa Longyear.
Galera lactea Lange.
On lawn. Kings Co. 26 June 1981-D.W.G. (ACAD 13671).

Conocybe tenera (Schaeff. ex Fr.) Fayod ex auct. sensu Kühner *in* Le Genre.
Galera (Encycl. Mycol. 7):68. 1935.
Galera tenera (Schaeff. ex Fr.) Quél.
From Lunenburg Co. 1913-A.H.M.

Coprinus atramentarius (Bull. ex Fr.) *in* Epicr. Syst. Mycol.:243. 1838.
On lawns and rich soil. Halifax and Kings Co. 8 June 1936-K.A.H. (KM-550, 4132 *in* DAOM).

Coprinus comatus (Müller in Flora Dan. ex Fr.) S.F. Gray *in* Nat. Arr. B. Pl. 1:632. 1821.
On lawns and other rich soil. General. 1881-J.S. (A.H.M.)

Coprinus disseminatus (Pers. ex Fr.) S.F. Gray *in* Nat. Arr. B. Pl. 1:632. 1821.
Pseudocoprinus disseminatus (Pers. ex Fr.) Kühner.
Among sphagnum moss. Halifax Co. 1880-J.S. (A.H.M.) as *Agaricus disseminatus* (Pers.) Fr.)

Coprinus domesticus (Bolt. ex Fr.) S.F. Gray *in* Nat. Arr. B. Pl. 1:632. 1821.
From Shelburne Co. 1908-A.H.M.

Coprinus lagopides Karst. var. **lagopides** *in* Hattsvampar 1:535. 1879.
On soil and in woods. Kings Co. 1 Sept. 1938-K.A.H. (KM-923 *in* DAOM).

Coprinus micaceus (Bull. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:247. 1838.
About stumps and on dung and compost. General. 1908-A.H.M. (L.E.W.-897) (KM-248, 249, 4133 *in* DAOM, K.A.H.).

Coprinus miser (Karst.) Karst. *in* Symb. Mycol. Fenn. 10:61. 1883.
On rabbit dung. Colchester Co. 30 June 1931-A.H.S., L.E.W. (W-527)

Coprinus ovatus (Schaeff.) Fr. *in* Epicr. Syst. Mycol.:242. 1838.
Halifax Co. Public Gardens. 1881-J.S. (A.H.M.).

Coprinus plicatilis (Curt. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:252. 1838.
On lawns and in pastures. Colchester, Halifax and Lunenburg Co. 1881-J.S. (A.H.M.) (L.E.W.-1577).

Coprinus sterquilinus (Fr.) Fr. *in* Epicr. Syst. Mycol.:242. 1838.
On cow dung and in woods. 1880-J.S. (A.H.M.).

Coprobia granulata (Bull. ex Fr.) Boud. *in* Hist. Class. Discom. Eur.:69. 1907.
On dung. Colchester and Victoria Co. 1 Aug. 1931-L.E.W. (W-1204 as *Ascophanus granulatus* (Bull.) Speg. var. *cervorum* (Rehm) (KM-1134 *in* DAOM K.A.H., as *Ascophanus granulatus* (Bull.) Speg.)

Coprotus lacteus (Cke. & Phill.) Kimbr., Luck-Allen & Cain *in* Can. J. Bot. 50:965. 1972.
Ascobolus lacteus Cke. & Phill.
Ascophanus lacteus (Cke. & Phill.) Phill.

On cow dung. Colchester Co. 3 July 1931-L.E.W. (W-377). (Kimbr. *et al.* may have included this collection under *C. ochraceus).*

Coprotus ochraceus (Crouan & Crouan) Larsen *in* Dan. Bot. Tidsskr. 66:1-32. 1971.
Ascobolus ochraceus Crouan & Crouan.
Ascophanus ochraceus (Crouan & Crouan) Boud.
On cow dung. Colchester and Victoria Co. 3 July 1931-L.E.W. (MICH) (KM-1135 *in* DAOM, K.A.H.).

Cordana pauciseptata Preuss *in* Linnaea 24:129. 1851.
On *Abies balsamea* (L.) Mill. (balsam fir) and *Betula lutea* Michx. f. (yellow birch). 1952-S.J.H. (DAOM 29443, 33686, 34449, 35806, 37683).

Cordyceps capitata (Holmsk. ex Fr.) Link *in* Handbuch 3:347. 1833.
Parasitic on subterranean *Elaphomyces* sp. Cumberland and Kings Co. 29 Aug. 1931-L.E.W. (W-1433 leg A.H.S.) (KM-1222, 5180, 5181 *in* DAOM, K.A.H.).

Cordyceps entomorrhiza (Fr.) Link *in* Handbuch 3:347. 1833.
On larvae of June beetles. Pictou Co. 1908-A.H.M. (as *Torrubia*).

Cordyceps militaris (L. ex St. Amans) Link *in* Handbuch 3:347. 1833.
On pupae of beetles and various cocoons. Colchester, Inverness and Kings Co. 6 Aug. 1931-L.E.W. (W-1070, 1070a leg. A.H.S., leg. A.R.P.-6217) (KM-1223 *in* DAOM, K.A.H.).

Cordyceps ophioglossoides (Ehr.) Link *in* Handbuch 3:347. 1833.
Cordyceps parasitica (Willd.) Seav.
Parasitic upon *Elaphomyces granulatus* Fr. and *E. variegatus* Vitt. Hants, Inverness, Kings and Queens Co. 4 Sept. 1927-L.E.W. (W-388). (KM-1101, 1224, 1226-1228, 5182 *in* DAOM, K.A.H.).

Cordyceps stylophora Berk. & Br. *in* J. Linn. Soc. London Bot. 1:158. 1857.
On beetle larvae. Colchester Co. 25 July 1931-L.E.W. (W-1167 det E.B. Mains).

Cordyceps variabilis Petch *in* Trans. Br. Mycol. Soc. 21:44. 1937.
Cordyceps viperina Mains.
On beetle larvae. Colchester Co. 25 July 1931-L.E.W. (W-1213, 1213a).

Coriolellus heteromorphus (Fr.) Bond & Sing. *in* Ann. Mycol. 39:60. 1941.
See *Antrodia heteromorpha* (Fr. per Fr.) Donk.

Coriolellus variiformis (Pk.) Sarkar *in* Can. J. Bot. 37:1262. 1959.
Trametes variiformis Pk.
On *Picea* sp. (spruce). Annapolis Co. 1934-K.A.H. (KM-104 *in* DAOM) (O-F5549).

Coriolus biformis (Klotz.) Pat. *in* Ess. Taxon. Hymén.:94. 1900.
Polyporus biformis Fr. (1839).
Trametes cervinus (Schw.) Bres. (1903).
On old fence logs and *Betula populifolia* Marsh. (wire birch). Pictou Co. 1908-A.H.M.

Coriolus hirsutus (Wulf. per Fr.) Quél. *in* Ench. Fung.:175. 1886.
Coriolus nigromarginatus (Schw.) Murr.
Polyporus hirsutus Wulf. ex Fr.
Common on species of *Acer* (maple). *Betula* (birch), *Fagus* (beech), *Prunus* (stone fruit) and *Salix* (willow). 1881-J.S. (A.H.M.) (L.E.W.-1096, 1096a, 1097) (KM-34, 35, 37, 790 *in* DAOM, K.A.H.) (O-F2970, 2974, 2975).

Coriolus pubescens (Fr.) Quél f. **velutinus** (Fr.) Pilát *in* Bull. Trimest. Soc. Mycol. Fr. (1935):365. 1936.
Poluporus velutinus Fr.
On *Alnus* sp. (alder), *Betula papyrifera* Marsh. (white birch), *B. populifolia* Marsh. (wire birch), *Fagus grandifolia* Ehrh. (beech), *Populus tremuloides* Michx. (trembling aspen) and *Populus* spp. Kings and Pictou Co. 1908-A.H.M. (KM-33a,b *in* DAOM, K.A.H.) (A.H.S. 1311, det. J.L.L.) (O-F2971, 2972).

Coriolus versicolor (L. ex Fr.) Quél. *in* Ench. Fung.:175. 1886.
Polyporus versicolor L. ex Fr.
Abundant everywhere on decaying wood. 1880-J.S. (A.H.M.) (L.E.W.-101) (KM-39-43, 774, 1758 *in* DAOM, K.A.H.) (O-F2245, 2976).

Corollospora comata (Kohlm.) Kohlm. *in* Ber. Dtsch. Bot. Ges. 75:126. 1962.
On intertidal wood. Lunenburg Co. 1970-G.A.N.

Corollospora cristata (Kohlm.) Kohlm. *in* Ber. Dtsch. Bot. Ges. 75:127. 1962.
On driftwood. Digby and Kings Co. 1970-G.A.N.

Corollospora maritima Wedermann *in* Notizbl. Bot. Gart. Mus. Berlin-Dahlem 8:248. 1922.
Arenariomyces cinctus Höhnk.
Peritrichospora integra Linder.
On driftwood. Digby and Shelburne Co. 1970-G.A.N.

Corticium albo-ochraceum Bres. *in* Fungi Polonici (Ann. Mycol. 1:96) 1903.
On bark of *Betula* sp. (birch). Colchester Co. 31 July 1935-L.E.W. (W-1759, fide H.S.J.).

Corticium atrovirens Fr. *in* Epicr. Syst. Mycol.:562. 1838.
On soil. Kings Co. 20 Nov. 1952-K.A.H. (KM-1696, 2765 *in* DAOM, R.M.),

Corticium bicolor Pk. *in* Bull. Buffalo Soc. Nat. Hist. 1:62. 1873.
On *Abies balsamea* (L.) Mill. (balsam fir) and *Picea* sp. (spruce). Kings Co. 8 Nov. 1954-K.A.H. (KM-3073 *in* DAOM, det, Joan Spiers).

Corticium bombycinum (Sommerf. ex Fr.) Karst. *in* Hedwigia 32:120. 1893.
On *Acer spicatum* Lam. (mountain maple), *Alnus* sp. (alder), *Salix* sp. (willow) and *Sambucus* sp. (elderberry). Colchester and Kings Co. 23 July 1931-L.E.W. (W-1121 a,b) (KM-2819, 3070 *in* DAOM, K.A.H. det. Joan Hanson).

Corticum cebennense Bourd. *in* Rev. Sci. Bourbonn. Centre 23:7. 1910.
See *Amylocorticium cebennense* (Bourd.) Pouz.

Corticium centrifugum (Lév.) Bres. *in* Ann. Mycol. 1:96. 1903.
On *Acer pensylvanicum* L. (striped maple). Colchester Co. 12 July 1935-L.E.W. (W-1737) (KM-2826 *in* DAOM, K.A.H.).

Corticium confluens (Fr.) Fr. *in* Epicr. Syst. Mycol.:564. 1838.
On *Acer* sp. (maple) and *Sambucus* sp. (elder). Colchester and Kings Co. 9 Nov. 1953-K.A.H. (KM-2831, 2832, 4284 det. L.K.W. *in* DAOM).

Corticium cremoricolor Berk. & Curt. *in* North Am. Fungi. 273. 1853-59.
On *Prunus* sp. (stone fruit). 1975-L.P.M., J.M.M.

Corticium deflectans (Karst.) Karst. *in* Krit. Öfvers. Finl. Basidsvampar:44. 1889.
On *Salix* sp. (willow). Colchester Co. 13 Aug. 1935-L.E.W. (W-1776, 1778 fide H.S.J.).

Corticium furfuraceum Bres. *in* Mycologia 17:69. 1925.
Corticium calceum Fr.
On *Abies* sp. (fir), *Picea* sp. (spruce) and other coniferous wood. Colchester and Kings Counties. 26 Aug. 1935-L.E.W. (W-1800 fide H.S.J.) (KM-103 *in* DAOM, K.A.H. fide L.O.O.).

Corticium fuscostratum Burt *in* Ann. Mo. Bot. Gard. 13:299. 1926.
On coniferous bark. Kings Co. 19 Nov. 1953-K.A.H. (KM-2814 *in* DAOM, det. Joan Hanson).

Corticium galactinum (Fr.) Burt *in* Bull. Chicago Acad. Sci. 7:137. 1909.
See *Scytinostroma galactinum* (Fr.) Donk.

Corticium geogenium Bres. *in* Ann. Mycol. 1:99. 1903.
Peniophora albo-straminea Bres.
On wood of *Pinus* sp. (pine). Kings Co. 7 Nov. 1954-K.A.H. (KM-3071 *in* DAOM, det. Joan Spiers).

Corticium hydnans (Schw.) Burt *in* Ann. Mot. Bot. Gard. 13:233. 1926.
On bark of *Abies balsamea* (L.) Mill. (balsam fir). Colchester Co. July 1935-L.E.W. (W-1747) fide H.S.J.

Corticium laeve Pers. ex Fr. *in* Epicr. Syst. Mycol.:560. 1838.
On *Acer* sp. (maple), *Aesculus hippocastanum* L. (horse chestnut), *Alnus* sp. (alder), *Populus tremuloides* Michx. (trembling aspen) and *Salix* sp. (willow). Kings Co. 29 Nov. 1952-K.A.H. (KM-2137, 3052, 3054, 4286 *in* DAOM, conf. R.M.L.).

Corticium leucoxanthum Bres. *in* Fungi Tridentini 2:57. 1898.
See *Gloeocystidiellum leucoxanthum* (Bres.) Boid.

Corticium livido-caeruleum Karst. *in* Not. Sällsk. Fauna Flora Fenn. 9:370. 1868.
On wood of *Picea* sp. (spruce). Kings Co. 26 April 1953-K.A.H. (KM-3081 *in* DAOM det. Joan Spiers).

Corticium lividum (Pers. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:563. 1838.
On *Abies* sp. (fir) and *Betula* sp. (birch). Colchester Co. 30 Aug. 1933-L.E.W. (W-1642, 1642a det. M.A.D.) (KM-3080 *in* DAOM, K.A.H.).

Corticium notabile Jacks. *in* Can. J. Res., C, 26:156. 1948.
On hardwood. Colchester Co. 4 July 1931-L.E.W. (W-385).

Corticium ochraceum Fr. *in* Epicr. Syst. Mycol.:563. 1838.
On decorticated conifer wood. Colchester Co. 15 Aug. 1931-L.E.W. (W-1338 det. M.A.D.).

Corticium porosum Berk. & Curt. apud Berk & Br. *in* Ann. Mag. Nat. Hist., Ser. 5, 3:211. 1879.
See Gloeocystidiellum porosum (Berk. & Curt.) Donk.

Corticium radiosum Fr. *in* Epicr. Syst. Mycol.:560. 1838.
See *Gloeocystidiellum citrinum* (Pers.) Donk.

Corticium roseo-cremeum Bres. *in* Ann. Mycol. 3:163. 1905.
On *Abies balsamea* (L.) Mill. Colchester Co. July 1935-L.E.W. (W-1722 det. H.S.J.).

Corticium sulphureo-isabellinum Litsch. apud Pilát *in* Acta Mus. Nat. Pragae 2(B):43. 1940.
On *Abies balsamea* (L.) Mill. (balsam fir). 1975-L.P.M., J.M.M.

Corticium sulphureum (Pers. ex Fr.) *in* Epicr. Syst. Mycol.:561. 1838.
On decaying wood of various sorts. Annapolis, Colchester, Halifax and Kings Co. 1940-L.E.W. (W-1778 fide M.A.D., H.S.J.) (KM-3085, 4290-4296 *in* DAOM, K.A.H.).

Corticium tulasnelloideum Höhn. & Litsch. *in* Sitzungsber. K. Akad. Wiss. Math.-, Naturwiss. Kl. 117(1):1118. 1908.
See *Xenasma tulasnelloideum* (Höhn. & Litsch.) Donk.

Corticium vellereum Ell. & Cragin *in* Bull. Washburn Coll. Lab. Nat. Hist. 1:66. 1885.
On bark of *Fagus* sp. (beech) and *Ulmus* sp. (elm). Colchester and Kings Co. Sept. 1935-L.E.W. (W-1810 det. H.S.J.) (KM-139 *in* DAOM, K.A.H.).

Corticium sp.
On *Abies balsamea* (L.) Mill. (balsam fir). Kings Co. 7 Aug. 1954-K.A.H. (KM-3086 *in* DAOM).

Corticium sp.
On *Alnus* sp. (alder), *Betula lutea* Michx. f. (yellow birch), *Picea* sp. (spruce), *Pinus strobus* L. (white pine) and *Populus tremuloides* Michx. (trembling aspen). 1975-L.P.M., J.M.M.

Cortinarius acutus (Pers. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:314. 1838.
Gregarious on moss under *Picea* sp. (spruce). Colchester Co. 5 Sept. 1931-A.H.S., L.E.W. (W-885).

Cortinarius alboviolaceus (Pers. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:280. 1838.
In mixed woods. Kings. Lunenburg and Pictou Co. 1908-A.H.M. (KM-2597, 4055 *in* DAOM, K.A.H.).

Cortinarius annulatus Pk. *in* Annu. Rep. N.Y. State Mus. 43:19. 1890.
On humus under mixed woods. Colchester Co. 29 Aug. 1931-A.H.S., L.E.W. (W-842).

Cortinarius anomalus (Fr. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:286. 1838.
Under *Fagus* sp. (beech). Colchester and Pictou Co. 18 Aug. 1931-A.H.S., L.E.W. (W-770).

Cortinarius argentatus (Pers. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:279. 1838.
From Digby and Halifax Co. 11 Sept. 1953-K.A.H. (KM-2598, 2599, 2600-2602, 4057 *in* DAOM).

Cortinarius armeniacus (Pers. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:304. 1838.
On ground in coniferous woods. Halifax Co. 1880-J.S.

Cortinarius armillatus (Fr. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:295. 1838.
In mixed woods. Colchester, Guysborough, Halifax, Kings and Pictou Co. 1908-A.H.M. (L.E.W.-742) (KM-250, 4056, 4058 *in* DAOM, K.A.H.).

Cortinarius aurantio-turbinatus Lange *in* Dan. Bot. Ark. 8(7):18. 1935.
In wooded ravine, Kings Co. 28 Sept. 1953-K.A.H. (KM-2603-2607, 2609 *in* DAOM).

Cortinarius bolaris (Pers. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:282. 1838.
On humus under mixed woods. Colchester and Kings Co. 21 Aug. 1931-A.H.S., L.E.W. (W-781) (KM-910 *in* DAOM, K.A.H.).

Cortinarius callisteus (Fr. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:281. 1838.
From Halifax Co. 1880-J.S. (A.H.M.).

Cortinarius camphoratus Fr. *in* Epicr. Syst. Mycol.:286. 1838.
Cortinarius hircinus Fr.
Under *Abies* sp. (fir) and *Picea* sp. (spruce). Colchester Co. 5 Sept. 1931-A.H.S., L.E.W. (W-882, 882a).

Cortinarius caninus (Fr.) Fr. *in* Epicr. Syst. Mycol.:285. 1838.
Gregarious on humus. Colchester Co. 5 Sept. 1931-A.H.S., L.E.W.

Cortinarius castaneus (Bull. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:307. 1838.
Gregarious on moss under *Picea* sp. (spruce). Colchester and Halifax Co. 1880-J.S. (A.H.M.) (L.E.W.-891).

Cortinarius chrysolitus Kauff. *in* Bull. N.Y. State Mus. 179:101. 1915.
Singly on sphagnum moss. Colchester Co. 13 Aug. 1931-A.H.S., L.E.W. (W-744).

Cortinarius cinnamomeoluteus Orton *in* Trans. Br. Mycol. Soc. 43:217. 1960.
In woods of *Pinus resinosa* Ait. (red pine). Kings Co. 5 Oct. 1979-T.L.R. (ACAD 13238).

Cortinarius cinnamomeus (L. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:288. 1838.
Under *Picea* sp. (spruce). Colchester, Halifax, Kings, Lunenburg, Pictou and Victoria Co. 1880-J.S. (A.H.M.) (KM-986, 4059, 4060 *in* DAOM, K.A.H.) (L.E.W.-582).

Cortinarius collinitus (Pers. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:274. 1838.
From Halifax Co. 1880-J.S. (A.H.M.).

Cortinarius corrugatus Pk. *in* Annu. Rep. N.Y. State Mus. 24:72. 1872.
On humus under *Acer* sp. (maple) and *Fagus* sp. (beech). Colchester Co. 10 July 1931-A.H.S., L.E.W. (W-669).

Cortinarius cylindripes Kauff. *in* Bull. Torrey Bot. Club 32:321. 1905.
Singly under *Abies* sp. (fir) and *Picea* sp. (spruce). Colchester and Kings Co. 3 July 1931-A.H.S., L.E.W. (W-556) (KM-901, 902 *in* DAOM, K.A.H.).

Cortinarius delibutus Fr. *in* Epicr. Syst. Mycol.:276. 1838.
Cortinarius sphaerosporus Pk.
Under *Picea* sp. (spruce) on wet hillside. Colchester Co. 18 Aug. 1931-A.H.S., L.E.W. (W-782).

Cortinarius dilutus (Pers. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:305. 1838.
On humus under mixed woods. Colchester Co. 3 Sept. 1931-A.H.S., L.E.W. (W-863).

Cortinarius duracinus (Fr.) Fr. *in* Epicr. Syst. Mycol.:304. 1838.
On moss under *Abies* sp. (fir) and *Picea* sp. (spruce). Colchester Co. 6 Sept. 1931-A.H.S., L.E.W. (W-892).

Cortinarius erythrinus (Fr.) Fr. *in* Epicr. Syst. Mycol.:312. 1838.
On humus under hardwoods. Colchester Co. 5 Sept. 1931-A.H.S., L.E.W. (W-883).

Cortinarius evernius (Fr. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:294. 1838.
On sphagnum moss. Colchester, Guysborough, Halifax and Kings Co. 13 July 1931-A.H.S., L.E.W. (W-614) (KM-4061, 4062, 4063 *in* DAOM, K.A.H.).

Cortinarius firmus (Weinm.) Fr. *in* Epicr. Syst. Mycol.:303. 1838.
On grassy soil in open woods of *Picea* sp. (spruce). Colchester Co. 5 Sept. 1931-A.H.S., L.E.W. (W-888). (see—Pap. Mich. Acad. Sci. 21:163-197. 1936 for notes on this species).

Cortinarius herpeticus Fr. *in* Epicr. Syst. Mycol.:268. 1838.
Under *Abies* sp. (fir) and *Picea* sp. (spruce). Colchester Co. 18 Aug. 1931-A.H.S., L.E.W. (W-780).

Cortinarius huronensis Ammirati & Smith *in* Mich. Bot. 11(1):20. 1972, var. **huronensis.**
In *Sphagnum* and other mosses in boggy areas or humus under conifers. Antigonish and Kings Co. 1 Oct. 1978-T.L.R. (ACAD 13194, 13197 coll. K.A.H., 13198a, 13201, 13275).

Cortinarius incognitus Ammirati & Smith *in* Mich. Bot. 11(1):18. 1972.
In moss and leaf litter under conifers or in sandy pine areas. Antigonish and Kings Co. 16 Sept. 1979-T.L.R. (ACAD 13212, 13214, 13216-13218).

Cortinarius infractus (Pers. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:261. 1838.
Gregarious under conifers. Colchester Co. 26 Aug. 1931-A.H.S., L.E.W. (W-823, 823a).

Cortinarius iodes Berk. & Curt. *in* Ann. Mag. Nat. Hist. Ser. 2, 12:423. 1853.
Crowded under second growth of *Acer* sp. (maple). Colchester Co. 4 Sept. 1931-A.H.S., L.E.W. (W-874, 874a).

Cortinarius juberinus Fr. *in* Epicr. Syst. Mycol.:309. 1838.
On swampy ground under *Picea* sp. (spruce). Colchester Co. 1 July 1931-A.H.S., L.E.W. (W-574, 574a).

Cortinarius lilacinus Pk. *in* Annu. Rep. N.Y. State Mus. 26:61. 1874.
On swampy ground under *Picea* sp. (spruce). Colchester Co. 24 July 1931-A.H.S., L.E.W. (W-702).

Cortinarius lucorum (Fr.) Lange *in* Flora Agar. Dan. 3:7. 1938.
Gregarious in wet upland woods. Colchester Co. 27 Aug. 1931-A.H.S., L.E.W. (W-833).

Cortinarius malicorius Fr. *in* Epicr. Syst. Mycol.:289. 1838.
Cortinarius croceofolius Pk.
Solitary to gregarius in moist conifer woods. Colchester, Kings and Pictou Co. 27 Aug. 1931-A.H.S., L.E.W. (W-831, 838) (ACAD 13191, 13195, 13219-13221, 13223, T.L.R.).

Cortinarius morrisii Pk. *in* Bull. Torrey Bot. Club 32:79. 1905.
Gregarious in mixed woods. Colchester Co. 26 Aug. 1931-A.H.S., L.E.W. (W-825, 825a).

Cortinarius mucifluus Fr. *in* Epicr. Syst. Mycol.:274. 1838.
Scattered under *Picea* sp. (spruce). Colchester, Hants and Kings Co. 27 Aug. 1931-A.H.S., L.E.W. (W-836) (KM-911, 4064, 4065 *in* DAOM, K.A.H.).

Cortinarius multiformis (Fr.) Fr. *in* Epicr. Syst. Mycol.:263. 1838.
On humus under mixed woods. Colchester Co. 6 Sept. 1931-A.H.S., L.E.W. (W-890).

Cortinarius nigrellus Pk. *in* Annu. Rep. N.Y. State Mus. 26:62. 1874.
Under hardwoods. Colchester Co. 29 Aug. 1931-A.H.S., L.E.W. (W-845, 845a).

★**Cortinarius ochroleucus** (Schaeff. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:284. 1838.
From Pictou Co. 1908-A.H.M.

Cortinarius orichalceus (Batsch) Fr. *in* Epicr. Syst. Mycol.:267. 1838.
From Kings Co. 28 Sept. 1953-K.A.H. (KM-2610, 2611 *in* DAOM).

★**Cortinarius paleaceus** (Fr.) Fr. *in* Epicr. Syst. Mycol.:302. 1838.
From Queens Co. 23 Sept. 1962-K.A.H. (KM-5272 *in* DAOM).

Cortinarius pholideus (Fr. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:282. 1838.
Under *Abies* sp. (fir) and *Fagus* sp. (beech). Colchester Co. 3 Sept. 1931-A.H.S., L.E.W. (W-861).

Cortinarius plumiger (Fr.) Fr. *in* Epicr. Syst. Mycol.:294. 1838.
Under mixed *Abies* sp. (fir) and *Fagus* sp. (beech). Colchester Co. 3 Sept. 1931-A.H.S., L.E.W. (W-861).

Cortinarius pseudotubarius Robar, Harrison & Grund *in* Proc. N.S. Inst. Sci. 31:137. 1981.
In *Sphagnum* sp. and other mosses under conifers in mixed woods. Kings and Pictou Co. 13 Sept. 1979-T.L.R. (ACAD 13263-13267).

★**Cortinarius purpurascens** Fr. *in* Epicr. Syst. Mycol.:265. 1838.
In wooded ravine. Kings Co. 11 Oct. 1953-K.A.H. (KM-2612 *in* DAOM).

Cortinarius rubeus Robar, Harrison & Grund *in* Proc. N.S. Inst. Sci. 31:132. 1981.
In moss (*Polytrichum* sp.) on a sandy woods trail. Kings Co. 3 Oct. 1979-T.L.R. (ACAD 13239, 13240, 13241).

Cortinarius salor Fr. *in* Epicr. Syst. Mycol.:276. 1838.
On humus under *Acer* sp. (maple) and *Fagus* sp. (beech). Colchester Co. 27 Aug. 1931-A.H.S., L.E.W. (W-830a, 850).

Cortinarius sanguineus (Wolf. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:288. 1838.
On humus under *Picea* sp. (spruce). Colchester and Kings Co. 29 Aug. 1931-A.H.S., L.E.W. (W-843, 843a) (KM-2580 *in* DAOM, K.A.H.).

Cortinarius scutulatus (Fr.) Fr. *in* Epicr. Syst. Mycol.:294. 1838.
Under *Picea* sp. (spruce). Colchester Co. 3 Sept. 1931-A.H.S., L.E.W. (W-865).

Cortinarius semisanguineus (Fr.) Gill. *in* Hymén. Fr.:486. 1874.
Cortinarius cinnamomeus Fr. var. *semisanguineus* Fr.
On soil under conifers. Annapolis, Antigonish, Colchester, Guysborough, Kings and Pictou Co. 1913-A.H.M. (L.E.W.-560) (KM-251, 252, 4066-4068, 5267 *in* DAOM, K.A.H.) (ACAD 13243, 13245-13261, T.L.R.).

Cortinarius squamulosus Pk. *in* N.Y. State Cab. Rep. 23:108. 1872.
Under hardwoods. Colchester, Halifax and Kings Co. 31 Aug. 1931-A.H.S., L.E.W. (W-845, 845a) (KM-253, 354, 4069 *in* DAOM, K.A.H.).

Cortinarius subflexipes Pk. *in* Annu. Rep. N.Y. State Mus. 41:73. 1888.
On soil under *Acer* sp. (maple) and *Fagus* sp. (beech). Colchester Co. 1 Sept. 1931-A.H.S., L.E.W. (W-854).

Cortinarius sublanatus (Sow.) Fr. *in* Epicr. Syst. Mycol.:283. 1838.

Reported from Halifax and Pictou Co. 1881-J.S. (1908-A.H.M.). Not recognized in North America by Kauffman.

Cortinarius submarginalis Pk. *in* Bull. N.Y. State Mus. 54:950. 1902.
On humus under hardwoods. Colchester Co. 2 Sept. 1931-A.H.S., L.E.W. (W-856).

Cortinarius subpulchrifolius Kauff. *in* Agar. Mich. 1:371. 1918.
Under *Betula* sp. (birch) and *Tsuga* sp. (hemlock). Colchester Co. 18 Aug. 1931-A.H.S., L.E.W. (W-771).

Cortinarius subpurpurascens ([Batch] Fr.) Kickx *in* Flore Crypt. Flandres 2:190. 1867.
Under *Abies* sp. (fir) and *Picea* sp. (spruce). Colchester Co. 18 Aug. 1931-A.H.S., L.E.W. (W-791, 791a).

Cortinarius traganus (Fr. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:281. 1838.
Under *Abies* sp. (fir) and *Picea* sp. (spruce). Colchester Co. 31 Aug. 1931-A.H.S., L.E.W. (W-849, 849a).

Cortinarius triumphans Fr. *in* Epicr. Syst. Mycol.:256. 1838.
Under conifers. Colchester Co. 1 Sept. 1931-A.H.S., L.E.W. (W-851).

Cortinarius turbinatus (Bull. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:266. 1838.
From Halifax and Pictou Co. 1881-J.S. (A.H.M.). Not recognized as occurring in North America by Kauffman.

Cortinarius vibratilis (Fr.) Fr. *in* Epicr. Syst. Mycol.:277. 1838.
On mossy ground under conifers. Colchester and Kings Co. 24 July 1931-A.H.S., L.E.W. (W-698, 698a) (KM-255 *in* DAOM, K.A.H.).

Cortinarius violaceus (L. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:279. 1838.
Under conifers. General. 1908-A.H.M. (L.E.W.-713, 713a) (KM-256, 4070, 4071, 4072, 5270 *in* DAOM, K.A.H.).

Cortinarius whiteae Pk. *in* Bull. Torrey Bot. Club 29:560. 1902.
In mixed woods. Colchester and Richmond Co. 15 Aug. 1931-A.H.S., L.E.W. (W-761) (KM-5269 *in* DAOM, K.A.H.).

★**Coryne dubia** (Pers.) S.F. Gray *in* Nat. Arr. Br. Pl. 1:595. 1821.
Coryne sarcoides (Pers. ex Fr.) Bon.
See stat. perf. *Ascocoryne sarcoides* ([Jacq.] Gray) Groves & Wilson.

★**Coryne urnalis** (Nyl.) Sacc. *in* Fungi Ven. Novi vel Critici, Sér. 4:69. 1875.
See stat. perf. *Ascocoryne cylichnium* (Tul.) Korf.

Corynetes robustus Durand *in* Monogr. Geoglossaceae, Ann. Mycol. 6:416. 1908.
See *Microglossum atropurpureum* (Batsch ex Fr.) Karst.

Craterellus fallax A.H. Smith *in* Mich. Bot. 7:153. 1968.
On soil under hardwoods. Antigonish, Colchester, Halifax and Kings Co. 1913-A.H.M. (KM-149a-c, 916, 4103, 4104 *in* DAOM, K.A.H.) (L.E.W.-1414 coll. A.H.S.) (ACAD 13793). Previously misidentified as *C. cornucopioides* (L. ex Fr.) Pers.

Craterellus pistillaris Fr. *in* Epicr. Syst. Mycol.:534. 1838.
On soil in mixed woods. Colchester Co. 22 July 1929-L.E.W. (W-214, 214a coll. A.H.S.) L.E.W. states these collections may be forms of *Clavariadelphus pistillaris* (Fr.) Donk.

Crepidotus applanatus (Pers. ex Fr.) Kummer *in* Führ. in Pilzkd.:92. 1882.
On *Fagus grandifolia* Ehrh. (beech). Colchester and Kings Co. 28 July 1931-A.H.S., L.E.W. (W-683, 683a) (KM-261, 877 *in* DAOM, K.A.H., as *C. malachius* (Berk. & Curt.) Sacc.).

Crepidotus calolepis (Fr.) Karst. *in* Bidr. Finl. Nat. Folk 32:414. 1879.
Crepidotus fulvotomentosus Pk.
On *Acer* sp. (maple), *Populus tremuloides* Michx. (trembling aspen), *Sorbus*

americana Marsh (mountain ash) and other species of *Populus* and *Sorbus*. 1975-L.P.M., J.M.M.

Crepidotus mollis (Schaeff. ex Fr.) Kummer *in* Führ. in Pilzkd.:92. 1882.
Crepidotus haerens (Pk.) Sacc.
On coniferous and deciduous woods. Colchester and Guysborough Co. 30 June 1931-A.H.S., L.E.W. (W-513) (KM-4088 *in* DAOM, K.A.H.).

Crepidotus nephrodes (Berk. & Curt.) Sacc. *in* Syll. Fung. 5:882. 1887.
Crepidotus putrigenus (Berk. & Curt.) Sacc.
From Kings Co. 18 Aug. 1932-K.A.H. (KM-263, 264 *in* DAOM, fide A.H.S.).

Crepidotus stipitatus Kauff. *in* Agar. Mich. 1:524. 1918.
On *Fagus grandifolia* Ehrh. (beech). Colchester Co. 10 Aug. 1931-A.H.S., L.E.W. (W-731, 731a).

Crepidotus variabilis (Pers. ex Fr.) Kummer *in* Führ. in Pilzkd.:91. 1882.
Claudopus variabilis (Fr.) Gill.
On sticks and leaves. Colchester Co. 18 July 1931-A.H.S., L.E.W. (W-667).

Crepidotus versutus (Pk.) Sacc. *in* Syll. Fung. 5:888. 1887.
On *Fagus grandifolia* Ehrh. (beech). Colchester Co. 20 July 1931-A.H.S., L.E.W. (W-682).

Cribraria argillacea (Pers.) Pers. *in* Neues Mag. Bot. 1:91. 1794.
On dead wood of *Abies balsamea* (L.) Mill. (balsam fir). Pictou Co. 1906-C.L.M.

Cribraria elegans Berk. & Curt. *in* Berkeley, Grevillea 2:67. 1873.
On dead wood. 1934-T.H.M., G.W.M. (The Myxomycetes, MacMillan Co., N.Y.).

Cribraria intricata Schrad. *in* Nov. Gen. Pl. 7. 1797.
On decayed wood. Colchester and Pictou Co. 1906-C.L.M. (L.E.W.-255).

Cribraria macrocarpa Schrad. *in* Nov. Gen. Pl. 8. 1797.
On dead wood of conifers. Pictou Co. 1906-C.L.M.

Cribraria piriformis Schrad. *in* Nov. Gen. Pl. 4. 1797.
On decayed coniferous wood. Colchester Co. 25 July 1931-L.E.W. (W-1142).

Cribraria splendens (Schrad.) Pers. *in* Syn. Fung.:191. 1801.
On dead wood. 1934-T.H.M., G.W.M. (The Myxomycetes, MacMillan Co., N.Y.).

Crinipellis piceae Sing. *in* Rev. Mycol. 4:64. 1939.
On needles of *Picea* sp. (spruce). Kings Co. 16 July 1972-K.A.H. (MICH 11599).

Cristella mollusca (Pers. per Fr.) Donk *in* Persoonia 5:97. 1967.
Phlebiella candidissima (Schw.) W.B. Cke.
Polyporus candidissima (Schw.) Cke.
Poria candidissima (Schw.) Cke.
Trechispora candidissima (Schw.) Bond. & Sing.
On *Abies balsamea* (L.) Mill. (balsam fir), *Alnus* sp. (alder), *Fomes fomentarius* (L. ex Fr.) Kickx and *Populus* sp. (poplar). Kings Co. 14 Nov. 1931-K.A.H. (KM-64, 2850 *in* DAOM) (O-F3342) (WS-244, 315 *in* ACAD).

Cronartium coleosporioides Arth. *in* North Am. Flora 7:123. 1907.
On *Pinus banksiana* Lamb. (jack pine). 1955. (For. Insect Dis. Surv.:26.1955).

Cronartium comptoniae Arth. *in* Bull. Torrey Bot. Club 33:29. 1906.
On *Comptonia peregrina* (L.) Coult. (sweet fern), *Comptonia* sp., *Myrica gale* L. (sweet gale), *Pinus banksiana* Lamb. (jack pine), *P. contorta* Dougl. var. *latifolia* Engelm. (lodgepole pine), *P. echinata* Mill. (shortleaf pine), *P. mugo* Turra (Swiss mountain pine), *P. sylvestris* L. (Scots pine) and *Pinus* sp. General. 23 July 1936-J.F.H.

★**Cronartium quercuum** (Berk.) Miyabe ex Shirai *in* Bot. Mag. Tokyo 13:74. 1899.
On wood of *Pinus sylvestris* L. (Scots pine). Kings Co. 2 Sept. 1961-K.A.H.

Cronartium ribicola J.C. Fischer *in* Rabenhorst, Fung. Eur. Exs.:1595. 1872.
On *Pinus strobus* L. (white pine), *Ribes aureum* Pursh (golden currant), *R. glandulosum* Grauer (skunk currant), *R. grossularia* L. (principal source—European gooseberry), *R. hirtellum* Michx. (principal source—American gooseberry), *R. nigrum* L. (black currant), *R. oxyacanthoides* L. (wild gooseberry), *R. rubrum* L. and *R. sativum* Syme (red currents). General. 14 May 1925-J.F.H.

Crucibulum laeve ([Bull.] DC.) Kambly *in* Kambly & Lee, Univ. Iowa Stud. Nat. Hist. 17:167. 1936.
Crucibulum vulgare Tul. (1844).
On *Syringa vulgaris* L. (lilac), dead stems, twigs and other plant debris. General. 1908-A.H.M. (L.E.W.-1214, 6264 coll. A.R.P.) (KM-950, 1073-1076 *in* DAOM, K.A.H.) (S.F.M.-7, 19, 362, 380 *in* ACAD).

Cryptochaete rufa (Fr.) Karst. *in* Bidr. Finl. Nat. Folk 48:408. 1889.
Corticium pezizoideum (Schw.) Schrenk (non Ell. & Ev.).
Peniophora rufa (Fr.) Boid.
Stereum rufrum (Fr.) Fr.
On *Populus tremuloides* Michx. (trembling aspen) and other *Populus* sp. (poplar). Annapolis, Colchester and Kings Co. 13 July 1926-L.E.W. (W-108, 135) (KM-131, 763, 2064 *in* DAOM, K.A.H.) (DAOM 5466).

Cryptocline cinerescens (Bubák) v. Arx *in* Verh. K. Akad. Wet. Afd. Natuurkd. 2, 51, 3:73. 1957.
Gloeosporium cinerescens Bubák.
On *Quercus rubra* L. (red oak). 1960. (For. Insect Dis. Surv.:33. 1960).

★**Cryptodiaporthe aubertii** (Westend) Wehm. var. **comptoniae** (Schw.) Wehm. *in* The Genus *Diaporthe* Nitschke and its Segregates. Univ. Mich. Stud. Sci., Ser. 9:203. 1933.
On stem of *Comptonia peregrina* (L.) Coulter (sweet fern). Kings Co. 31 July 1952-C.L.L., D.W.C.

★**Cryptodiaporthe castanea** (Tul.) Wehm. *in* The Genus *Diaporthe* Nitschke and its Segregates. Univ. Mich. Stud. Sci., Ser. 9:205. 1933.
Stat. conid. *Fusicoccum castaneum* Sacc.
On new wood of *Castanea dentata* (Marsh.) Berkh. (American chestnut). Kings Co. 16 June 1971-C.O.G.

Cryptodiaporthe corni (Wehm.) Petrak *in* Ann. Mycol. 39:302. 1941.
Apioporthe corni Wehm.
On *Cornus alternifolia* L.f. (alternate-leaved dogwood). Colchester Co. 26 June 1935-L.E.W. (W-148, 1711).

Cryptodiaporthe galericulata (Tul.) Wehm. *in* Wehmeyer, The Genus *Diaporthe Nitschke* and its Segregates, Univ. Mich. Stud. Sci., Ser. 9:211. 1933.
On *Fagus grandifolia* Ehrh. (beech). Colchester Co. 21 July 1929-L.E.W. (W-104).

★**Cryptodiaporthe hystrix** (Tode) Petrak *in* Ann. Mycol 19:119. 1921.
Stat. conid. *Diplodina acerina* (Pass.) Sutton.
On *Acer negundo* L. (box elder) and *A. negundo* L. var. *interius* (Britt.) Sarg. (Manitoba maple). Kings Co. 29 May 1975-C.O.G., R.W.D., J.B. (DAOM 150009).

Cryptodiaporthe magnispora Wehm. *in* The Genus *Diaporthe Nitschke* and its Segregates. Univ. Mich. Stud. Sci., Ser. 9:204. 1933.
On *Acer rubrum L.* (red maple). 1975-L.P.M., J.M.M.

Cryptodiaporthe populea (Sacc.) Butin *in* Nachrichtenble Dtsch. Pflanzen schutzdienst. Braunschweig 9:69. 1957.
Stat. conid. *Discosporium populeum* (Sacc.) Sutton.
Crondrolea populea (Sacc.) Kleb.

Dothichiza populea (Sacc.) Briard.
On *Populus canadensis* Moench var. *eugenii* (Simon-Louis) Schelle (Carolina poplar), *P. nigra* L. var. *italica* Muench. (Lombardy poplar) and *P. tremuloides* Michx. (trembling aspen). Kings Co. 1929. (Annu. Rep. Prev. Plant Dis. Can. 9:64. 1929).

Cryptodiaporthe salicina (Curr.) Wehm., *in* The Genus *Diaporthe Nitschke* and its Segregates. Univ. Mich. Stud. Sci., Ser. 9:194. 1933.
Stat. conid. *Discella carbonacea* Berk. & Br.
Phacidium carbonaceum Fr.
On *Salix alba* L. var. *vitellina* (L.) Koch (white willow) and *Salix* sp. Colchester and Kings Co. 30 July 1929-J.F.H. (L.E.W.-521).

Cryptomycella pteridis (Kalchbr.) Höhn. *in* Mitt. Bot. Inst. Tech. Hochsch. Wien 2:48. 1926.
See stat. perf. *Cryptomycina pteridis* (Reb. ex Fr.) Höhn.

Cryptomycina pteridis (Reb. ex Fr.) Höhn. *in* Ber. Dtsch. Bot. Ges. 35:422. 1917.
Cryptomyces pteridis (Reb. ex Fr.) Rehm.
Phyllachora pteridis (Reb. ex Fr.) Fckl.
Stat. conid. *Cryptomycella pteridis* (Kalchbr.) Höhn.
On *Pteridium aquilinum* (L.) Kuhn var. *latiusculum* (Desv.) Underw. (bracken). Kings Co. 1950-L.E.W. (coll. & det. A.E.R., R-129).

Cryptospora alnicola Höhn. *in* Fragm. Mycol.:846. 1903.
On *Alnus* spp. Colchester Co. 3 Aug. 1929-L.E.W. (W-279, 1005, 1767).

Cryptospora aurantiaca Wehm. *in* Can. J. Res., C, 20:588. 1942.
On *Alnus* sp. (alder). Colchester Co. 9 July 1933-L.E.W. (W-1624 type).

Cryptospora betulae Tul. *in* Sel. Fung. Carp. 2:148. 1863.
On *Betula* sp. (birch). Colchester and Pictou Co. 14 July 1929-L.E.W. (W-61).

Cryptospora femoralis Pk. *in* Annu. Rep. N.Y. State Mus. 28:74. 1876.
On *Alnus* sp. (alder). Colchester Co. 19 June 1926-L.E.W. (P367, W-13, 13a, 335, 1623).

Cryptospora suffusa (Fr.) Tul. *in* Sel. Fung. Carp. 2:145. 1863 var. **nuda** Pk. *in* Annu. Rep. N.Y. State Mus. 45:58. 1893.
On *Corylus cornuta* Marsh. (beaked hazelnut). Colchester and Hants Co. 28 June 1929-L.E.W. (W-17, 1715).

Cryptosporiopsis cornina (Pk.) Petrak & Syd. *in* Ann. Mycol. 20:197. 1922.
See stat. perf. *Pezicula corni* Petrak.

Cryptosporiopsis corticola (Edg.) Nannf. *in* Nova Acta Reg. Soc. Sci. Upsal., Ser. 4(8):94. 1932.
Myxosporium corticola Edg.
See stat. perf. *Pezicula corticola* (Jorg.) Nannf.

Cryptosporiopsis coryli (Pk.) Sutton *in* The Coelomycetes:510. 1980.
Catinula turgida (Fr.) Desm.
See stat. perf. *Pezicula corylina* Groves.

Cryptosporiopsis curvispora (Pk.) Gremmen *in* Tijdschr. Plantenziekten 65:172. 1959.
Crytosporiopsis malicorticis (Cordley) Nannf. (1932).
Cryptosporiopsis perennas (Zeller & Childs) Wollenw. (1939).
Gloeosporium malicorticis Cordley (1900).
Gloeosporium perennans Zeller & Childs (1925).
See stat. perf. *Neofabraea malicorticis* Jacks.

Cryptosporiopsis pruinosa (Pk.) Wollenw. *in* Arb. Biol. Abt. (Anst.-Reichsanst). Berl. 22:527. 1939.
Sphaeronema pruinosum Pk.
See stat. perf. *Pezicula pruinosa* Farl.

Cryptosporiopsis scutellata (Otth) Petrak *in* Hedwigia 62:315. 1921.
See stat. perf. *Pezicula* ocellata (Pers.) Seav.

★**Cryptosporium minimum** Laub. *in* Centralbl. Bakt. 2, 19:166. 1907.
On winter injured canes of *Rubus idaeus* L. (red raspberry). Colchester Co. 17 June 1971-C.O.G. (*in* DAOM).

Cucurbidothis pithyophila (Fr.) Petrak *in* Ann. Mycol 19:201. 1921.
Cucurbitaria pithyophila (Fr.) Ces. & de Not.
On *Pinus strobus* L. (white pine). 1975-L.P.M., J.M.M.

★**Cucurbitaria comptoniae** Cke. & Ell. *in* Grevillea 6:12. 1877.
On wood of *Comptonia peregrina* (L.) Coult. (sweet fern). Kings Co. 11 May 1953-D.W.C.

Cucurbitaria elongata (Fr.) Grev. *in* Scott. Crypt. Flora, tab. 195. 1823-29.
Cucurbitaria subfenestratum (Berk. & Curt.) Sacc.
Stat conid. *Camarosporium robiniae* Sacc.
On *Robinia pseudoacacia* L. (black locust). 1975-L.P.M., J.M.M.

Cudonia circinans (Pers.) Fr. *in* Summa Veg. Scand. 348. 1849.
On moss and duff under Abies sp. (fir) and *Picea* sp. (spruce). Colchester, Kings and Victoria Co. 5 Aug. 1931-L.E.W. (W-1216, 1216a,b,c,d,e,f) (KM-1001, 1069a *in* DAOM, K.A.H.) (ACAD 1006a,b, K.A.H.).

Cudonia lutea (Pk.) Sacc. *in* Atti. Inst. Venet. 6(3):725. 1885.
On leaves under *Fagus grandifolia* Ehrh. (beech) and on rotten log. Colchester and Kings Co. 14 Aug. 1931-L.E.W. (W-1304, 1304a) (KM-1007, 1070 *in* DAOM, K.A.H.) (ACAD 1007, K.A.H.).

Cunninghamella elegans Lendner *in* Bull. Herb. Boiss. 2, 7:250. 1907.
From soil. Cumberland Co. 1980-D.B., A.T.

Curvularia clavata Jain *in* Trans. Br. Mycol. Soc. 45:542. 1962.
On leaves of *Pisum sativum* L. (garden pea) and calyx of *Vaccinium macrocarpon* Ait. (cranberry). Inverness and Kings Co. 21 Jan. 1970-C.O.G., K.A.H. (DAOM 146884).

Curvularia protuberata Nelson & Hodges *in* Mycologia 57:823. 1965.
From soil. Cumberland Co. 1980-D.B., A.T.

Cyathus olla (Batsch) Pers. *in* Syn. Fung.:237. 1801.
Cyathus vernicosus (Bull.) DC.
In gardens and orchards. Kings and Pictou Co. 1908-A.H.M. (KM-1077-1080 *in* DAOM, K.A.H.) (ACAD S.F.M. 1077m).

Cyathus striatus Pers. *in* Syn. Fung.:237. 1801.
Cyathus hirsuta (Schaff.) White.
From Kings Co. 1978-S.F.M. (SFM-20, 63 *in* ACAD) (ACAD 10572).

Cylindrocarpon destructans (Zins.) Scholten *in* Neth. J. Plant Pathol. 70, suppl. 2:9. 1964.
Cylindrocarpon radicicola Wollenw.
From *Daucus carota* L. (Queen Anne's Lace), roots of *Fragaria* sp. (cultivated strawberry), wood of *Malus pumila* Mill. (apple) and milled peat, *Sphagnum* sp. Annapolis, Kings and Yarmouth Co. March 1958-K.A.H., C.O.G.

★**Cylindrocarpon didymum** (Hartig) Wollenw. *in* Fus. Autogr. Del., ed. 2:650. 1926.
From crown of *Fragaria* sp. (cultivated strawberry). Kings Co. 11 June 1963-C.O.G.

Cylindrocarpon mali (Allesch.) Wollenw. *in* Z. Parasitenkd. 1:150. 1928.
See stat. perf. *Nectria galligena* Bres.

★**Cylindrocladium scoparium** Morg. *in* Bot. Gaz. 17:191. 1892.
On leaves and stems of *Azalea* sp. Hants Co. 22 July 1976-R.W.D., C.O.G. (DAOM 159456).

Cylindrosporella microsperma (Pk.) Petrak *in* Ann. Mycol 22:42. 1924.
Gloeosporium betulae-luteae Sacc. & Dearn.
On *Betula lutea* Michx. f. (yellow birch). 1975-L.P.M., J.M.M.

Cylindrosporium ariaefolium Ell. & Ev. *in* Bull. Torrey Bot. Club 27:575. 1900.
On *Spiraea latifolia* (Ait.) Borkh. (meadowsweet, hardhack). Hants Co. I.L.C. (O-645).

★**Cylindrosporium betulae** Davis *in* Trans. Wis. Acad. Sci. Arts Letts. 16:759. 1909.
On leaves of *Betula populifolia* Marsh. (wire birch). Kings Co. 31 July 1952-D.W.C., G.L.M.

Cylindrosporium dearnessii Ell. & Ev. *in* Proc. Acad. Nat. Sci. Phila.:83. 1891.
On *Ostrya virginiana* (Mill.) K. Koch (American hop-hornbeam or ironwood). 1955. (For. Insect Dis. Surv.:26. 1955).

Cylindrosporium filipendulae Thüm. *in* Oesterr. Bot. Z. 28:146. 1878.
On *Spiraea alba* DuRoi (meadowsweet) and *S. latifolia* (Ait.) Borkh. (meadowsweet). Inverness and Queens Co. 20 July 1939-J.F.H. (I.L.C. O-5160).

Cylindrosporium padi Karst. *in* Symb. Mycol. Fenn. 15:159. 1884.
Septoria cerasina Pk.
(probably *Cylindrosporium hiemale* Higgins fide L.E.W.).
On *Prunus* sp. (wild cherry). 1903-B.D.H., J.A.K.

Cylindrosporium pomi Brooks *in* Bull. Torrey Bot. Club 35:453. 1908.
Phoma pomi Pass.
Stat. perf. *Mycosphaerella pomi* (Pass.) Linau (not known in Canada).
On fruit of *Malus pumila* Mill. (apple). Kings Co. 1924-J.F.H.

Cymadothea trifolii (Pers. ex Fr.) Wolf *in* Mycologia 27:71. 1935.
On *Trifolium hybridum* L. (alsike clover) and *T. pratense* L. (red clover). General. 4 July 1925-J.F.H.

Cyphellopsis anomala (Pers. ex Fr.) Donk *in* Meded. Ned. Mycol. Verh. 18-20:128. 1931.
Henningsomyces anomala (Pers. ex Fr.) Kuntze.
Peziza anomala (Pers.) Fr.
Solenia anomala (Pers.) Fr.
On *Alnus crispa* var. *mollis* Fern. (downy alder), *Populus* sp. (poplar), *Salix* sp. (willow) and *Ulmus* sp. (elm). Colchester and Kings Co. 3 Aug. 1929-L.E.W. (W-97, 210) (O-8495) (KM-2768 *in* DAOM, K.A.H.) (ACAD 2768).

Cyptotrama asprata (Berk.) Redhead & Ginns *in* Can. J. Bot. 58:731. 1980.
Collybia lacunosa (Pk.) Pk.
Cyptotrama chrysopepla (Berk. & Curt.) Sing.
Gerronema chrysopepla (Berk. & Curt.) Sing.
Tricholoma lacunosum (Pk.) Sacc.
Xerula chrysopepla (Berk. & Curt.) Sing.
On *Acer* sp. (maple) and conifers. Halifax, Kings and Victoria Co. 26 July 1931-K.A.H. (DAOM 39077, 110843, 110844, 110845) (MICH 11691).

★**Cystoderma amianthinum** (Scop. ex Fr.) Fayod var. **amianthinum** *in* Ann. Sci. Nat., Sér. 7,9:351. 1889.
In moss in conifer woods. General. 1968-K.A.H. (ACAD 13628).

★**Cystoderma amianthinum** (Scop. ex Fr.) Fayod var. **rugosoreticulatum** (Lorinser) Smith & Sing. *in* Pap. Mich. Acad. Sci. Arts Lett. 30(1944):110. 1945.
From Kings Co. 22 Oct. 1980-K.A.H. (ACAD 13626).

Cystoderma granulosum (Batsch ex Fr.) Fayod var. **granulosum** *in* Ann. Sci. Nat., Sér. 7,9:351. 1889.
Lepiota granulosa (Fr.) Quél.
From Kings and Lunenburg Co. 1913-A.H.M. (KM-371, 373, 903, 1575, 1713, 4003 *in* DAOM, K.A.H. fide A.H.S.).

Cystoderma granulosum (Batsch ex Fr.) Fayod var. **adnatifolium** (Pk.) Smith and Sing. *in* Pap. Mich. Acad. Sci. Arts Lett. 30(1944):90. 1945.
Under *Picea* sp. (spruce). Colchester Co. 18 Aug. 1931-A.H.S., L.E.W. (W-779 as *Armillaria adnatifolia* (Pk.) Kauff.).

Cystostereum murraii (Berk. & Curt.) Pouz. *in* Česká Mykol. 13(1):13. 1959.
Stereum murraii (Berk. & Curt.) Burt.
On *Acer rubrum* L. (red maple), *Betula lutea* Michx. f. (yellow birch), *B. papyrifera* Marsh. (white birch), *B. populifolia* Marsh. (wire birch), *Betula* sp. and *Populus grandidentata* Michx. (largetoothed aspen). Colchester Co. 14 July 1931-L.E.W. (W-1021, 1108, 1319 fide M.A.D.) (KM-2776, 2777, 4352 *in* DAOM, K.A.H.).

Cytidia salicina (Fr.) Burt *in* Ann. Mo. Bot. Gard. 11:10. 1924.
On deciduous wood and *Salix* sp. (willow). Annapolis, Colchester, Halifax and Pictou Co. 1908-A.H.M. (L.E.W.-5441) (DAOM F3326) (KM-2772, 4283 conf. L.K.W. *in* DAOM, K.A.H.).

★**Cytospora annulata** Ell. & Ev. *in* Proc. Acad. Nat. Sci. Phila.:160. 1893.
On wood of *Acer saccharinum* Marsh. (silver or white maple). Kings Co. 1 Mar. 1951-D.W.C.

Cytospora dubyi Sacc. *in* Syll. Fung. 3:270. 1884.
On *Juniperus sabina* L. (savin) and *Thuja occidentalis* L. (eastern white cedar). Kings Co. Mar. 1951-D.W.C.

★ **Cytospora elaeagni** Allesch. *in* Hedwigia:162. 1897.
On wood of *Elaeagnus angustifolia* L. (oleaster). Kings Co. 2 Mar. 1951-D.W.C.

★ **Cytospora oxyacanthae** Rabenh. *in* Oesterr. Bot. Z.:503. 1858.
On wood of *Crataegus oxyacantha* L. (English hawthorn). Kings Co. 9 April 1953-D.W.C.

Cytospora pinastri Fr. *in* Syst. Mycol 2:544. 1822.
On wood of *Chamaecyparis pisifera* (Sieb. & Zucc.) Endl. (Sawara cedar). Kings Co. 1951-D.W.C.

★ **Cytospora tamaricis** Brun. *in* Actes. Soc. Linn. Bord.:143. 1897.
On wood of *Tamarix* sp. (tamarisk). Kings Co. 22 Feb. 1951-D.W.C.

Dacrymyces abietinus Schroet. var. **abietinus** *in* Cohn Krypt. Fl. Schles. 3(1):400. 1888.
Dacrymyces stillatus Fr.
On *Pinus* sp. (pine), coniferous logs and old railroad ties. Kings Co. and others. 1913-A.H.M. (KM-1704, 5155 *in* DAOM, D.W.C., K.A.H.).

Dacrymyces deliquescens (Mérat) Duby *in* Bot. Gall.:720. 1828-30, var. **deliquescens** Kennedy *in* Mycologia 50:910. 1958.
Dacrymyces deliquescens (Bull).) Duby.
On *Fagus* sp. (beech) and *Pinus* sp. (pine). Colchester and Kings Co. 11 July 1931-L.E.W. (W-487) (KM-5280 *in* DAOM, K.A.H.).

Dacrymyces deliquescens (Mérat) Duby var. **minor** (Pk.) Kennedy *in* Mycologia 50:908. 1958.
Dacrymyces minor Pk.
On decorticated wood of *Abies* sp. (fir), *Picea* sp. (spruce) and *Populus* sp. (poplar). Annapolis, Colchester and Halifax Co. 28 June 1931-L.E.W. (W-311, 311a, 312) (KM-5279 *in* DAOM, K.A.H.).

Dacrymyces ellisii Coker *in* J. Elisha Mitchell Sci. Soc. 35:167. 1920.
On *Quercus* sp. (oak) and on fallen limb of *Ulmus* sp. (elm). Kings Co. 20 Feb. 1953-K.A.H. (KM-2019, 5149, 5151 *in* DAOM det. D.W.C.).

Dacrymyces palmatus (Schw.) Bres. *in* Höhnel, Oesterr. Bot. Z. 54:425. 1904.
Dacrymyces aurantius (Schw.) Farl.
On *Acer spicatum* Lam. (mountain maple), *Tsuga canadensis* (L.) Carr. (eastern

hemlock) and conifer stub. Colchester, Kings and Victoria Co. 18 July 1931-L.E.W. (W-1083) (O-F3186).

Dacrymyces punctiformis Neuhoff *in* Schweiz. Z. Pilzkd. 12:81. 1934.
On *Pinus* sp. (pine) and deciduous wood. Kings Co. 7 Nov. 1952-K.A.H. (KM-2103-2106, 5157 *in* DAOM, det. D.W.C.).

Dactylaria brochopaga Drechsler *in* Mycologia 29:517. 1937.
In association with nematodes from compost and dung (cow, horse). Kings Co. 1980-M.E.A.

Dactylium candidum Nees *in* Das System der Pilze und Schwämme 38:58. 1816/17.
Candelabrella candida Rifai.
Dactylaria candida (Nees) Sacc.
In association with nematodes from dung (cow), rotting swamp and soil. Kings Co. 1908-M.E.A.

Daedalea confragosa (Bolt.) Fr. *in* Syst. Mycol. 1:336. 1821.
See *Daedaleopsis confragosa* (Bolt. ex Fr.) Schroet.

★**Daedalea extensa** Pk. *in* Annu. Rep. N.Y. State Mus. 44:21. 1891.
On fallen log of *Betula* sp. (birch). Kings Co. 3 July 1968-K.A.H. (MICH 12678 coll. K.A.H. det. J.L.L.).

Daedalea quercina (L.) Fr. *in* Syst. Mycol. 1:333. 1821.
On *Fagus grandifolia* Ehrh. (beech) and *Quercus* sp. (oak). Halifax, Kings, Lunenburg and Pictou Co. 1907-A.H.M. (KM-4358 *in* DAOM, K.A.H.).

Daedalea unicolor (Bull.) Fr. *in* Syst. Mycol. 1:336. 1821.
See *Cerrena unicolor* (Bull. ex Fr.) Murr.

Daedaleopsis confragosa (Bolt. ex Fr.) Schroet *in* Cohn., Krypt. Fl. Schles. 3:492. 1889.
Daedalea confragosa (Bolt. ex Fr.) Fr.
On *Acer saccharum* Marsh. (sugar maple), *Alnus rugosa* var. *americana* (Regel) Fern. (speckled alder), *Betula lutea* Michx. f. (yellow birch), *Fagus grandifolia* Ehrh. (beech) and other species of *Acer, Alnus, Betula* and *Salix* (willow). General. 1881-J.S. (1908-A.H.M.) (KM-54a,b *in* DAOM, K.A.H.) (L.E.W.-1209, 1209a).

Daldina concentrica (Bolt. ex Fr.) Ces. & de Not. *in* Comm. Soc. Critt. Ital. 1:198. 1863.
On *Alnus* sp. (alder), *Betula* sp. (birch), *Fagus grandifolia* Ehrh. (beech) and *Ulmus* sp. (elm). Colchester, Cumberland, Halifax and Pictou Co. 1908-A.H.M. (L.E.W.-94, 221, 1019) (KM-5175-5177 *in* DAOM, K.A.H.).

Darluca filum (Biv.-Bern ex Fr.) Berk. *in* Outl. Br. Fungol.:318. 1860.
See *Sphaerellopsis filum* (Biv.-Bern. ex Fr.) Sutton.

Dasyscyphus agassizii (Berk. & Curt.) Sacc. *in* Syll. Fung. 8:438. 1889.
Lachnella agassizii (Berk. & Curt.) Seav.
On *Abies balsamea* (L.) Mill. (balsam fir), *Picea* sp. (spruce) and *Pinus strobus* L. (white pine). Colchester, Halifax and Kings Co. 6 July 1929-L.E.W. (W-22, 330, 1661) (KM-118, 3118a *in* DAOM, K.A.H.) (O-2747 det. G.G.H.).

Dasyscyphus corticalis (Pers. ex Fr.) Karst. *in* Mycol. Fenn. 1:159. 1871.
Lachnea corticalis (Pers. ex Fr.) Gill.
Lachnella corticalis (Pers.) Fr.
On bark of *Populus* sp. (poplar). Colchester Co. 13 Aug. 1931-L.E.W. (W-1299).

Dasyscyphus occidentalis Hahn & Ayers *in* Mycologia 26:90. 1934.
Lachnella occidentalis (Hahn & Ayers) Seav.
On *Larix laricina* (DuRoi) Koch (larch). Colchester Co. 8 July 1931-L.E.W. (W-436).

Dasyscyphus virgineus S.F. Gray *in* Nat. Arr. Br. Pl. 1:671. 1821.
Lachnum virgineum (Batsch ex Fr.) Karst.
On bark and decayed wood of *Acer* sp. (maple), *Fagus* sp. (beech) and *Spiraea*. Colchester Co. 4 July 1931-L.E.W. (W41, 382, 497, 1573).

Datronia mollis (Sommerf.) Donk *in* Persoonia 4:338. 1966.
Antrodia mollis (Sommerf.) Karst.
Trametes mollis (Sommerf.) Fr.
On *Acer pensylvanicum* L. (striped maple), *A. rubrum* L. (red maple), *A. saccharum* Marsh. (sugar maple) and species of *Acer, Alnus* (alder) and *Ulmus* (elm). Kings Co. 28 Nov. 1931-K.A.H. (KM-50, 50a, 809, 4232 *in* DAOM) (O-F2247, 2991).

Davisomycella ampla (Davis) Darker *in* Can. J. Bot. 45:1423. 1967.
Lophodermium amplum (Davis) Davis.
On *Pinus banksiana* Lamb. (jack pine). Halifax Co. 1932-G.D.D. (Contrib. Arnold-Arbor. p. 43. 1932).

Delphinella balsameae (Waterm.) E. Müller *in* E. Müller & von Arx, Beitr. Krypt. Fl. Schweiz. 11(2):27. 1962.
On *Abies balsamea* (L.) Mill. (balsam fir). 1975-L.P.M., J.M.M.

Dendrocorticium roseocarneum (Schw.) Larsen & Gilbertson *in* Norw. J. Bot. 24:115. 1977.
Laeticorticium roseocarneum (Schw.) Boid.
Stereum roseocarneum (Schw.) Fr.
On wood of many species including *Fagus* sp. (beech) and *Quercus* sp. (oak). Colchester and Kings Co. 24 Aug. 1926-L.E.W., (W-1516, 1516a det. M.A.D.) (KM-2841-2843, 3050, 4321-4339 *in* DAOM, K.A.H.) (DAOM F5461, 99574).

Dendrocorticium violaceum Jacks. *in* Larsen & Gilbertson, Norw. J. Bot. 24:116. 1977.
On *Alnus* sp. (alder). Annapolis and Kings Co. 26 Sept. 1959-K.A.H. (DAOM 99461, 99462, 99463).

Dendrophoma obscurans (Ell. & Ev.) H.W. And. *in* Bull. Ill. Agric. Exp. Stn. 229:135. 1920.
See *Phomopsis obscurans* (Ell. & Ev.) Sutton.

★**Dentinum albidum** (Pk.) Snell *in* Mycologia 37:51. 1945.
Found in mixed woods, mostly deciduous. Annapolis Co. 1961-K.A.H. (KM-3501, 3564 *in* DAOM).

★**Dentinum albomagnum** (Banker) Pouz. *in* Česká Mykol. 10:76. 1956.
From Kings Co. 13 Oct. 1969-K.A.H. (MICH 8773).

Dentinum repandum (Fr.) S. F. Gray var. **repandum** *in* Nat. Arr. Br. Pl. 1:650. 1821.
Hydnum repandum Fr.
Common on soil throughout the province. 1880-J.S. (L.E.W.-57, 1193, 1193a) (KM-676, 1233, 3562, 3679-3683, 4748-4750, and others *in* DAOM, K.A.H.).

Dentinum repandum (Fr.) S.F. Gray var. **album** (Quél.) Harrison *in* Can. Dep. Agric. Publ. 1099:19. 1961.
Common in coniferous woods on hollow logs and stumps. Annapolis, Halifax and Kings Co. 21 Oct. 1958-K.A.H. (KM-3500, 4384, 4896 *in* DAOM).

Dentinum umbilicatum (Pk.) Pouz. *in* Česká Mykol. 10:76. 1956.
In mixed and deciduous woods. General. 22 Sept. 1955-K.A.H. (KM-2952, 3498, 4751, 4893-4895 *in* DAOM).

Dermea acerina (Pk.) Rehm *in* Ber. Bayer. Bot. Ges. 13:197. 1912.
Stat. conid. *Sphaeronema acerinum* Pk.
On *Acer rubrum* L. (red maple). Kings Co. 1946-J.W.G. (DAOM 4652) leg. K.A.H.

Dermea ariae (Pers. ex Fr.) Tul. ex Karst *in* Mycol. Fenn. 1:224. 1871.
Stat. conid. *Micropera sorbi* (Fr.) Sacc.
On *Sorbus americana* Marsh. (American mountain ash). Colchester Co. 4 July 1931-L.E.W. (J.W.G. 641 ex W-402) fide J.W.G.

Dermea balsamea (Pk.) Seav. *in* Mycologia 24:427. 1932.
Stat. conid. *Gelatinosporium abietinum* Pk.
On *Abies balsamea* (L.) Mill. (balsam fir) and *Tsuga canadensis* (L.) Carr. (hemlock). Colchester and Kings Co. 8 July 1931-L.E.W. (J.W.G.-513 ex L.E.W.-2072; T, L.E.W.-1082) det. J.W.G. (DAOM 3977).

Dermea cerasi (Pers. ex Fr.) Fr. *in* Syst. Orb. Veg.:115. 1825.
Stat. conid. *Micropera drupacearum* Lév.
Foveostroma drupacearum (Lév.) Di Cosmo (1978).
On *Prunus pensylvanica* L.f. (pin cherry). Colchester and Kings Co. 4 Sept. 1931-L.E.W. (J.W.G.-797 ex L.E.W.-1753) (DAOM 4630, 4632, 4635, 4851).

Dermea molliuscula (Schw.) Cash *in* Mycologia 29:304. 1937.
Stat. conid. *Gelatinosporium fulvum* Pk.
On *Betula* sp. (birch). Colchester and Kings Co. 31 July 1931-L.E.W. (DAOM 4694) (J.W.G.-552, 514 ex L.E.W.-1287a) det. J.W.G.

Dermea peckiana (Rehm) Groves *in* Mycologia 29:67. 1937.
Stat. conid. *Micopera stellata* (Ell.) Jacz.
On *Nemopanthus mucronata* (L.) Trel. (false holly). Cumberland Co. 24 July 1936-I.L.C. (DAOM 3784 det. J.W.G.) (J.W.G.-497).

Dermea pinicola Groves *in* Mycologia 38:403. 1946.
On wood of *Pinus strobus* L. (white pine). Kings Co. 19 May 1950-C.O.G., J.W.G. (*in* DAOM).

Dermea prunastri (Pers. ex Fr.) Fr. *in* Summa Veg. Scand.:362. 1849.
Stat. conid. *Micropera spuria* Höhn.
On *Prunus* sp. (stone fruit). Colchester and Kings Co. 1946-J.W.G., I.L.C. (J.W.G.-798 ex L.E.W.-1692) (DAOM 4698).

★**Dermea viburni** Groves *in* Mycologia 32:745. 1940.
On wood of *Viburnum cassinoides* L. (witherod). Kings Co. 1 Oct. 1953-K.A.H., D.W.C.

Diachea leucopodia (Bull.) Rostaf. *in* Monogr. Mycetozoa:190. 1874.
On dead leaves and debris, and upon living leaves of ferns. Colchester Co. 6 Sept. 1931-L.E.W. (W-1485).

Diaporthe acerina (Pk.) Sacc. *in* Syll. Fung. 1:611. 1882.
On *Acer spicatum* Lam. (mountain maple). Colchester and Kings Co. 16 June 1926-L.E.W. (P52c,d, W-1069).

Diaporthe alleghaniensis R. Horner Arnold *in* Can. J. Bot. 45:787. 1967.
Stat. conid. *Phomopsis* sp.
On *Betula lutea* Michx. f. (yellow birch). June 1948-A.J.S. (DAOM 70881, 70905).

Diaporthe arctii (Lasch) Nits. var. **arctii** *in* Pyren. Germ.:268. 1870.
On *Aster* sp., *Gnaphalium* sp. (cudweed) and *Solidago* sp. (goldenrod). Colchester Co. 27 July 1931-L.E.W. (W-1161, 1536, 1574, 1611).

Diaporthe arctii (Lasch) Nits. var. **achilleae** (Auersw.) Wehm. *in* The Genus *Diaporthe Nitschke* and its Segregates. Univ. Mich. Stud. Sci., Ser. 9:24. 1933.
On *Achillea millefolium* L. (yarrow). Colchester Co. 22 June 1933-L.E.W. (W-1531).

★**Diaporthe caraganae** Jacz. *in* Hedwigia 34(38). 1895.
Stat. conid. *Cytosporina serebrianikowii* Bubák.
Phomopsis serebrianikowii (Bubák) Höhn.

On *Caragana arborescens* Lam. (caragana or Siberian pea tree). 30 May 1978-C.O.G., R.W.D. (coll. by John F. Hayes at Nash Creek, Restigouche Co., N.B.) (DAOM 169159).

Diaporthe decedens. (Fr.) Fckl. *in* Symb. Mycol. Nachtr. 1:30. 1871.

On *Corylus cornuta* Marsh. (hazlenut). Colchester and Kings Co. 26 June 1926-L.E.W. (P308a,b, W-1677).

Diaporthe eres Nits. *in* Pyren. Germ.:246. 1870.

On petioles of *Fragaria* sp. (cultivated strawberry), *Lonicera* sp. (honeysuckle), *Malus pumila* Mill. (apple), *Myrica pensylvanica* Loisel. (bayberry), *Prunus avium* L. (sweet cherry), *P. domestica* L. (plum), *Pyrus communis* L. (pear) and *Ulmus americana* L. (elm). Annapolis, Halifax, Hants, Kings and Victoria Co. Sept. 1929-L.E.W. (W-287, 1240) (DAOM 145550, C.O.G., R.H.A., M.P.C.).

Diaporthe impulsa (Cke. & Pk.) Sacc. *in* Syll. Fung. 1:618. 1882.

On *Sorbus americana* Marsh. (mountain ash). Colchester Co. 12 July 1929-L.E.W. (W-181).

Diaporthe linearis (Nees) Nits. *in* Pyren. Germ.:277. 1870.

On *Solidago* sp. (goldenrod). Colchester Co. 30 July 1929-L.E.W. (W-153, 209, 1608, 1650).

★**Diaporthe medusaea** Nits. *in* Pyren. Germ.:251. 1870.

Stat. conid. *Phomopsis syringina* (Sacc.) Trav.

On twigs of *Syringa vulgaris* L. (lilac). Yarmouth Co. 12 July 1968-C.O.G., R.H.A. (DAOM 145552).

Diaporthe oxyspora (Pk.) Sacc. *in* Syll. Fung. 1:627. 1882.

On *Fragaria* sp. (cultivated strawberry) and *Ilex verticillata* (L.) Gray (Canada holly). Kings Co. 26 June 1926-L.E.W. (P364).

★**Diaporthe phaseolorum** (Cke. & Ell.) Sacc. *in* Syll. Fung. 1:692. 1882.

Stat. conid. *Phomopsis phaseoli* (Desm.) Grove.

On seed of *Glycine max* (L.) Merr. (soybean). Hants Co. 1974-G.G.S., R.W.D., C.O.G.

Diaporthe quadruplex Wehm. *in* Can. J. Res., C, 20:590. 1942.

On *Solidago* sp. (goldenrod). Colchester Co. 1 Aug. 1929-L.E.W. (W-207).

Diaporthe racemula (Cke. & Pk.) Sacc. *in* Syll. Fung. 1:691. 1882.

On *Epilobium angustifolium* L. (fireweed) and other *Epilobium* species. Colchester and Kings Co. 25 June 1926-L.E.W. (P374, W-1012, 1588).

Diaporthe tessella (Pers.) Rehm *in* Rehm, Ascomyceten:176. 1873.

On *Salix* sp. (willow). Colchester Co. 27 June 1931-L.E.W. (W-306).

Diaporthe tuberculosa (Ell.) Sacc. *in* Syll. Fung. 1:620. 1882.

On *Amelanchier* spp. (service berry or shadbush). Colchester Co. 26 July 1933-L.E.W. (W-1593, 1705).

Diaporthe vaccinii Shear *in* U.S. Dep. Agric. Tech. Bull.:258. 1931.

Stat. conid. *Phomopsis vaccinii* Shear.

On *Vaccinium angustifolium* Ait. (lowbush blueberry), *V. corymbosum* L. (highbush blueberry) and *V. macrocarpon* Ait. (cranberry). Kings and Yarmouth Co. 1946-K.A.H.

Diaporthe viburni Dearn & Bisby *in* Fungi of Manitoba:76. 1929, var. **spiraeicola** Wehm. *in* The Genus *Diaporthe* Nitschke and its Segregates. Univ. Mich. Stud. Sci., Ser. 9:123. 1933.

On *Spiraea* sp. Colchester Co. 3 Sept. 1929-L.E.W. (W-281, 496).

Diatrype stigma (Hoffm. ex Fr.) Fr. *in* Summa Veg. Scand.:385. 1849.

On *Betula* sp. (birch) and *Quercus* sp. (oak). Colchester and Kings Co. 8 July 1931-L.E.W. (W-431) (KM-5170, 5171 *in* DAOM, K.A.H.).

Diatrypella betulina (Pk.) Sacc. *in* Syll. Fung. 1:208. 1882.
On twigs and limbs of *Betula* spp. (birch). Colchester and Kings Co. 13 July 1926-L.E.W. (W-92, 106, 469, 1632) (O-4865).

Diatrypella discoidea Cke. & Pk. *in* Annu. Rep. N.Y. State Mus. 28:71. 1876.
On *Betula* sp. (birch) and *Prunus* sp. (stone fruit). Colchester and Guysborough Co. 7 Sept. 1925-L.E.W. (W-104, 203, 477).

Diatrypella favacea (Fr.) Ces. & de Not. *in* Schem. Sfer. Ital.:28. 1863.
On *Betula* sp. (birch). Colchester and Kings Co. 25 June 1926-L.E.W. (W-397, 1154, 1675).

Diatrypella nigro-annulata (Grev.) Nits. *in* Pyren. Germ.:81. 1870.
On *Fagus grandifolia* Ehrh. (beech). Colchester Co. 3 Sept. 1931-L.E.W. (W-1463).

Diatrypella tocciaeana de Not. *in* Schem. Sfer. Ital.:30. 1863.
On *Alnus* sp. (alder). Colchester Co. 7 Sept. 1929-L.E.W. (W-286).

Dibotryon morbosum (Schw.) Theiss. & Syd. *in* Ann. Mycol. 13:663. 1915.
See *Apiosporina morbosa* (Schw.) v. Arx.

Dichaena faginea (Pers.) Fr. *in* Elench. Fung. 2:141. 1828.
On bark of living *Fagus grandifolia* Ehrh. (beech). Victoria Co. 1950-L.E.W. (W-1687).

Dichomitus squalens Reid *in* Rev. Biol. 5:149-150. 1965.
Polyporus anceps Pk. (1895).
Trametes squalens Karst.
Tyromyces anceps (Pk.) Murr. (1907).
On *Abies balsamea* (L.) Mill. (balsam fir), *Picea glauca* (Moench) Voss (white spruce), *P. mariana* (Mill.) BSP. (black spruce), *Pinus resinosa* Ait. (red pine), *Pinus* sp (pine) and coniferous woods. Kings and Pictou Co. 2 Sept. 1925-L.E.W. (A.R.P.-42) (ACAD 1327, 1659).

Dictydium cancellatum (Batsch) Macbr. *in* North Am. Slime-Moulds:172. 1899.
On decayed wood. Colchester and Pictou Co. 1906-C.L.M. (L.E.W.-131, 191, 1256).

Diderma spumarioides (Fr.) Fr. *in* Syst. Mycol. 3:104. 1829.
On decayed leaves and bark of *Fagus* sp. (beech). Colchester and Victoria Co. 24 July 1931-L.E.W. (W-1138, 1221).

Diderma testaceum (Schrad.) Pers. *in* Syn. Fung.:167. 1801.
On porcupine dung. Pictou Co. 15 Aug. 1931-L.E.W. (W-1328 coll. A.H.S.).

Didymaria didyma (Ung.) Pound *in* Am. Nat. 23:163. 1889.
See *Ramularia didyma* Ung.

Didymella applanata (Niessl) Sacc. *in* Syll. Fung. 1:546. 1882.
On canes of *Rubus idaeus* L. (red raspberry). General. 27 June 1929-J.F.H.

Didymellina macrospora Kleb. *in* Ber. Dtsch. Bot. Ges. 42:60. 1924.
Stat. conid. *Heterosporium iridis* (Fautr. & Roum.) Jacques.
On leaves of *Iris* sp. (blueflag). Kings Co. 26 June 1933-K.A.H.

Didymium melanospermum (Pers.) Macbr. *in* North Am. Slime-Moulds:88. 1899.
On dead leaves, wood, moss, etc. Colchester and Pictou Co. 1 July 1931-L.E.W. (W-348, 1033, 1494).

Didymium minus (List.) Morg. *in* J. Cinc. Soc. Nat. Hist. 16:145. 1894.
On fallen leaves of *Fagus* sp. (beech). Pictou Co. 1913-C.L.M.

Didymium nigripes (Link) Fr. *in* Syst. Mycol. 3:119. 1829, var. **xanthopus** (Ditm.) List. *in* Lister, Monogr. Mycetozoa:98. 1894.
On duff of *Picea* sp. (spruce). Colchester Co. 18 Aug. 1931-L.E.W. (W-1375). Identified as the variety by G.W.M.

Didymosphaeria thalictri Ell. & Dearn. *in* Trans. Can. Inst.:89. 1897.
On *Thalictrum* sp. (meadow rue). Colchester Co. 21 June 1926-L.E.W. (W-1556 and P366).

Diheterospora chlamydosporia (Goddard) Barron & Onions *in* Can. J. Bot. 44:866. 1966.
From soil. Cumberland Co. 1980-D.B., A.T.

Diheterospora reniformis (Barron) Barron *in* Can. J. Bot. 58:438. 1980.
Verticillium reniformis Barron (Mycopathologia 50:272. 1973).
From soil under *Vaccinium corymbosum* L. (highbush blueberry). Kings Co. 1979-G.L.B.

Diheterospora rotiferorum Barron *in* Can. J. Bot. 58:432. 1980.
Recorded from old sawdust pile/soil. Kings Co. 1979-G.L.B.

Diheterospora tagenophora (Drechsler) Barron *in* Can. J. Bot. 58:438. 1980.
Acrostalagmus tagenophorus Drechsler.
From soil under *Azalea* shrubs. Kings Co. 1979-G.L.B.

Dinemasporium strigosum (Pers. ex Fr.) Sacc. *in* Michelia 2:281. 1881.
Dinemasporium graminum (Lib.) Lév.
Peziza strigosa Per.
See stat. perf. *Phomatospora dinemasporium* Webster.

Diplocarpon earlianum (Ell. & Ev.) Wolf *in* J. Elisha Mitchell Sci. Soc. 39:158. 1925.
Stat. conid. *Marssonina fragariae* (Lib.) Kleb.
On *Fragaria* sp. (cultivated strawberry). General. 12 July 1928-J.F.H.

Diplocarpon rosae Wolf *in* Bot. Gaz. 54:231. 1912.
Stat. conid. *Marssonina rosae* (Lib.) Died.
On *Rosa* sp. (rose). General. 27 Aug. 1925-J.F.H.

★ **Diploceras hypericinum** (Ces.) Died. *in* Krypt. Fl. Mark Brandenb. 9:870. 1915.
See *Seimatosporum hypericinum* (Ces.) Sutton.

Diplodia maydis (Berk.) Sacc. *in* Syll. Fung. 3:373. 1884.
Diplodia zeae (Schw.) Lév.
On *Zea mays* L. (corn). 1950-L.E.W. (O-3677 det. F.S.T.).

Diplodina acerina (Pass.) Sutton *in* The Coelomycetes:604. 1980.
Discella acerina (Westend.) v. Arx.
Septomyxa negundinis Allesch.
See stat. perf. *Cryptodiaporthe hystrix* (Tode) Petrak.

Diplodina eurhododendri Voss *in* Mat. Pilzfll. Kains 5:229. 1887.
See stat. perf. *Encoeliopsis rhododendri* (Ces. ex Rehm) Nannf.

Diplodina salicis Westend. *in* Notices I-IX (Cinq. Not. p. 19) Brux. 1851-1866.
On *Salix* sp. (willow). 1975-L.P.M., J.M.M.

★ **Diplodina strobi** Grove *in* Br. Stem and Leaf Fungi 1:336. 1935.
On cone of *Picea* sp. (spruce). Cumberland Co. 5 June 1953-D.W.C.

Discella carbonacea (Fr.) Berk. & Br. *in* Ann. Mag. Nat. Hist., Ser. 2(5):377. 1850.
See stat. perf. *Cryptodiaporthe salicina* (Curr.) Wehm.

★ **Discina korfii** Raitv. *in* Bot.-alased Tood, Tartu 9:371. 1970.
Gyromitra korfii (Raitv.) Harmaja (1973).
From Cape Breton Island and Kings Co. July 1948-K.A.H.

Discina macrospora Bubák *in* Ann. Mycol. 2:395. 1904.
On rotting wood. Annapolis, Kings and Pictou Co. 12 Apr. 1932-K.A.H. (KM-1141, 1142 *in* DAOM) (DAOM 111513).

Discinella schimperi (Naw.) Redhead & Spicer *in* Mycologia 73:906. 1981.
Helotium schimperi Nawaschin.
Hymenoscyphus schimperi (Naw.) Eckblad.

A parasite of *Sphagnum squarrosum* Crome (moss). Southwest Head, St. Paul Island, off northern Cape Breton. 1981-S.A. Redhead, K.W. Spicer. (National Museum of Canada no. 220457, coll. J.S.E. as no. 5302421, 17 Aug. 1953).

★**Discogloeum veronicae** (Lib.) Petrak *in* Ann. Mycol. 27:370. 1929.
Gloeosporium veronicae Dearn. & House.
Gloesporium veronicae (Lib.) Karakulin.
On leaves of *Veronica officinalis* L. (speedwell). Kings Co. 4 Oct. 1951-D.W.C.

Discosia artocreas (Tode) Fr. *in* Summa Veg. Scand.:423. 1849.
On *Hamamelis virginiana* L. (witchhazel), *Rhododendron* sp. and *Vaccinium macrocarpon* Ait. (cranberry). Inverness and Kings Co. 9 Oct. 1951-K.A.H., I.L.C., C.O.G. (DAOM 145902).

Discosia splendida Kirschst. *in* Died., Krypt. Fl. Mark Brandenb. 9:727. 1915.
On dead stems of *Monotropa uniflora* L. (indian-pipe). Colchester Co. July 1912-L.E.W. (W-67).

★**Discosia strobilina** (Lib.) Fr. *in* Beitr. Mykol.:68. 1863.
On cones of *Picea* sp. (spruce). Kings Co. 16 April 1953-K.A.H. det. D.W.C.

Discosporium populeum (Sacc.) Sutton *in* Commonw. Mycol. Inst. Mycol. Pap. 141:75. 1977.
Chondroplea populea (Sacc.) Kleb.
Dothichiza populea Sacc. & Briard.
See stat. perf. *Cryptodiaporthe populea* (Sacc.) Butin.

★**Discosporium tremuloides** (Ell. & Ev.) Sutton *in* The Coelomycetes:575. 1908.
Gloeosporium tremuloides Ell. & Ev.
Leptomelanconium tremuloides (Ell. & Ev.) v. Arx.
On leaves of *Populus tremuloides* Michx. (trembling aspen). Kings Co. 15 Oct. 1951-C.O.G., D.W.C.

Discula betulina (Westend.) v. Arx *in* Verh. K. Akad. Wet. Afd. Natuurkd. 2, 51, 3:64. 1957.
Gloeosporium betulicola Sacc. & Dearn.
On leaves of *Betula* sp. (birch). Kings Co. 20 Sept. 1925-J.F.H.

Discula umbrinella (Berk. & Br.) Sutton *in* The Coelomycetes:505. 1980.
Discula quercina (Cke) Sacc.
Gloeosporium umbrinellum Berk. & Br.
See stat. perf. *Apiognomonia errabunda* (Rob.) Höhn.

Ditiola radicata Fr. var. **radicata** *in* Syst. Mycol. 2:170. 1822.
Dacrymyces stipitatus (Bourd. & Galz.) Neuhoff.
Dacryomitra nuda (Berk. & Br.) Pat.
On *Abies balsamea* (L.) Mill. (balsam fir) and *Pinus* sp. (pine). Colchester, Halifax and Lunenburg Co. 1888-J.S. (A.H.M.) (L.E.W.-1466) (KM-2110, 2111, *in* DAOM, K.A.H. det. D.W.C. as *D. stipitatus)* N.S. Mus. 733(1A), D.W.C.).

Ditiola radicata Fr. var. **gyrocephala** (Berk. & Curt.) Kennedy *in* Mycologia 56:302. 1964.
Dacryomitra brunnea Martin.
From N.S. 12 Sept. 1935, (A1) coll. P.A. Vestal.

Doratomyces nanus (Ehrenb. ex Link) Morton & Smith *in* Commonw. Mycol. Inst. Mycol. Pap. 86:80. 1963.
From crown of *Fragaria* sp. (cultivated strawberry) and tuber of *Solanum tuberosum* L. (potato). Kings Co. 5 May 1963-C.O.G.

★**Doratomyces stemonitis** (Pers. ex Fr.) Morton & Smith *in* Commonw. Mycol. Inst. Mycol. Pap. 86:70-74. 1963.
From decayed tuber of *Solanum tuberosum* L. (potato). Kings Co. 5 May 1963-C.O.G.

Dothichiza populea Sacc. & Briard *in* Syll. Fung. 3:672. 1884.
See *Discosporium populeum* (Sacc.) Sutton.

Dothidella kalmiae (Pk.) Sacc. *in* Syll. Fung. 2:631. 1883.
Phyllachora kalmiae (Pk.) Petrak.
Causing witches'-broom effect on *Kalmia angustifolia* L. (lambkill). Colchester and Halifax Co. 5 Sept. 1929-L.E.W. (W-265, 1621).

Dothidella osmundae (Pk. & Clint.) Sacc. *in* Syll. Fung. 2:631. 1883.
On *Osmunda cinnamomea* L. (cinnamon fern), *Pteretis pensylvanica* (Willd.) Fern. (fiddle head fern) and *Pteridium aquilinum* (L.) Kuhn var. *latiusculum* (Desv.) Underw. (bracken fern). Colchester Co. 15 July 1929-L.E.W. (W-15, 141, 445, 1664).

★ **Dothiorella macrospora** (Berk & Curt.) Sacc. *in* Syll. Fung. 3:239. 1884.
On *Acer saccharinum* L. (silver or white maple). Kings Co. 26 Feb. 1951-D.W.C., C.L.L.

Dothiorella ulmi Verrall & May *in* Mycologia 29:322. 1937.
See *Plectophomella ulmi* (Verral & May) Redfern & Sutton.

Dothiorella sp.
On *Pinus strobus* L. (white pine). 1975-L.P.M., J.M.M.

Dreschler erythrospila (Drechsler) Shoem. *in* Can. J. Bot. 37:880. 1959.
Collected by spore trap in sheep pasture. Cumberland Co. Summer of 1972-D.B., A.T., M.M. Hoehn.

Drepanopeziza populi-albae (Kleb.) Nannf. *in* Nova Acta Reg. Soc. Sci. Upsal., Ser. 4, 8(2):170. 1932.
Stat. conid. *Marssonina castagnei* (Desm. & Mont.) Magn.
On *Populus alba* L. (white poplar) and *P. grandidentata* Michx. (large-toothed aspen). Annapolis and Kings Co. 3 July 1953-D.W.C. (DAOM 44004 as *M. castagnei*).

Drepanopeziza populorum (Desm.) Höhn *in* Ann. Mycol. 15:332. 1917.
Stat. conid. *Marssonia populi* (Lib.) Magn.
On *Populus alba* L. (white poplar), *P. grandidentata* Michx. (large-toothed aspen), *P. tremuloides* Michx. (trembling aspen) and *Salix* sp. (willow). Kings and Lunenburg Co. 29 July 1950-J.F.H.

Drepanopeziza ribis (Kleb.) Höhn. *in* Ann. Mycol. 15:332. 1917.
Pseudopeziza ribis Kleb.
Stat. conid. *Gloeosporidiella ribis* (Lib.) Petrak.
On *Ribes alpinum* L. (alpine currant), *R. sativum* Syme (red currant) and other *Ribes* spp. General. 1903-B.D.H., J.A.K. det. I.L.C. (O-4329).

Drepanopeziza salicis (Tul.) Höhn, *in* Hedwigia 62:54. 1921.
Pseudopeziza salicis (Tul.) Pot.
Stat. conid. *Monostichella salicis* (Westend.) v. Arx.
Gloeosporium salicis Westend.
On *Salix alba* L. var. *vitellina* Stokes (yellow willow). Kings Co. 24 Sept. 1930-K.A.H.

Drepanopeziza tremulae Rimpau *in* Phytopathol. Z. 43:288. 1962.
Stat. conid. *Marssonina tremulae* (Lib.) Kleb.
On leaves of *Populus canadensis* Moench var. *eugenii* (Simon-Lewis) Schelle (Carolina poplar) and *P. tremuloides* Michx. (trembling aspen). Annapolis Valley. 1973. (For. Insect Dis. Surv.:29. 1973).

Drepanopeziza variabilis Müller, Hütter & Schüpp *in* Sydowia, Ann. Mycol., Ser. 7, 12:412. 1958.
Stat. conid. *Gloeosporidiella variabilis* (Laub.) Nannf.
Gloeosporidiella variabile (Laub.) v. Arx.

Gloeosporium variabile Laub.
On *Ribes alpinum* L. (alpine currant). Queens Co. 1961. (Can. Plant Dis. Surv. 41:106. 1961.).

Durandiella fraxini (Schw.) Seav. *in* North Am. Cup.-Fungi (Inoperculates): 367. 1951.
Stat. conid. *Corniculariella spina* (Berk. & Rav.) Di Cosmo (1978).
Sphaerographium fraxini (Pk.) Sacc.
On *Fraxinus americana* L. (white ash) and *F. pensylvanica* Marsh. (red ash). Kings Co. 1950-L.E.W. (W-447) (O-4633 det. J.W.G.)

Durandiella lenticellicola Groves *in* Can. J. Bot. 32:132. 1954.
On *Crataegus* sp. (hawthorn) and *Sorbus americana* Marsh. (mountain ash). Kings Co. 1954-J.W.G. (DAOM 4744, J.W.G.-557).

Durella compressa (Pers.) Tul. *in* Sel. Fung. Carp. 3, XXII:177. 1865.
Patellaria congregata Berk. & Curt.
On decorticated hardwood. Colchester Co. 29 June 1931-L.E.W. (W-321 det. E.T.W.).

Durella lecideola (Fr.) Rehm *in* Ascom. Lojk. 19. 1882.
Patellaria lecideola Fr.
On coniferous wood. Colchester Co. 7 Aug. 1933-L.E.W. (W-1618 det. E.T.W.).

Eccilia rhodocylix (Lasch) Kummer *in* Führ. in Pilzkd.:71. 1882.
Rhodophyllus rhodocylix (Lasch) Quél.
On old stump. Colchester Co. 25 July 1931-A.H.S., L.E.W. (W-704).

Eccilia roseo-albo-citrina Atk. *in* Ann. Mycol. 7:369. 1909.
On humus under hardwoods. Colchester Co. 20 July 1931-A.H.S., L.E.W. (W-676).

Echinella rhabdocarpa (Ell.) Seav. *in* North Am. Cup-Fungi (Inoperculates): 294. 1951.
Erinella rhabdocarpa (Ell.) Sacc.
On *Comptonia peregrina* (L.) Coult. (sweet-fern). Kings Co. 1950-L.E.W. (O-5105, J.W.G.)

Eichleriella leveilliana (Berk. & Curt.) Burt *in* Ann. Mo. Bot. Gard. 2:744. 1915.
Corticium leveillianum Berk. & Curt.
Stereum leveillianum (Berk. & Curt.) Berk. & Curt.
On *Alnus rugosa* (DuRoi) Spreng. (speckled alder). Kings Co. 1950-L.E.W. (O-F5138).

Eladia saccula (Dale) G. Smith *in* Trans. Br. Mycol. Soc. 44:47. 1961.
Penicillium sacculum Dale apud Biourge.
From soil. Cumberland Co. 1980-D.B., A.T.

Elaphomyces granulatus Fr. *in* Syst. Mycol. 3:59. 1829.
Elaphomyces cervinus (Pers.) Schroet.
Under *Fagus* sp. (beech) and *Pinus* sp. (pine). Pictou Co. 1913-A.H.M. (KM-1496 *in* DAOM, K.A.H.).

Elaphomyces variegatus Vitt. *in* Monogr. Tuber. tab. 4, fig. 4:68. 1831.
Elaphomyces muricatus Fr.
From Colchester and Pictou Co. 15 July 1931-L.E.W. (W-1135, 1135a fide C.W.D.) (KM-1229 *in* DAOM, K.A.H.).

Elfvingia megaloma (Lév.) Murr. *in* Bull. Torrey Bot. Club 30:300. 1903.
Fomes applanatus (Pers. ex Wallr.) Gill.
Ganoderma applanatum (Pers. ex S.F. Gray) Pat.
Polyporus applanatus Pers. ex S.F. Gray.
Polyporus megaloma Lév.
On dead wood of many hardwoods including *Acer rubrum* L. (red maple), *A.*

saccharum Marsh. (sugar maple), *Betula lutea* Michx. f. (yellow birch), *B. papyrifera* Marsh. (white birch), *B. populifolia* Marsh. (wire birch), *Fagus grandifolia* Ehrh. (beech), *Fraxinus excelsoir* L. (European ash), *Quercus rubra* L. (red oak) and species of *Acer. Betula, Coprinus* (Agaricaceae fungus), *Malus* (apple), *Picea* (spruce), *Populus* (poplar), *Quercus* and *Ulmus* (elm). General. 1908-A.H.M. (KM-22b, 750 *in* DAOM) (O-F2196, 7207) (L.E.W.-1053, 6267 coll. A.R.P.).

Elsinoe ampelina (de Bary) Shear *in* Phytopathology 19:677. 1929.

Stat. conid. *Sphaceloma ampelinum* De Bary.

On leaves of *Vitis vinifera* L. (wine grape). Hants Co. 10 Oct. 1945-J.F.H., D.B.O.S.

Elsinoe tiliae Creelman *in* Mycologia 48:556. 1956.

On leaves of *Tilia europaea* L. (European linden). Lunenburg Co. 15 Sept. 1954-D.W.C.

Elsinoe veneta (Burkh.) Jenkins *in* J. Agric. Res. 44:696. 1932.

Stat. conid. Sphaceloma necatar (Ell. & Ev.) Jenkins & Shear.

On leaves of *Rubus allegheniensis* Porter (wild blackberry) and leaves and stem of *R. idaeus* L. (red raspberry). General. 6 Nov. 1925-J.F.H.

Encoelia fascicularis (Alb. & Schw. ex Fr.) Karst. *in* Not. Sällsk. Fauna Flora Fenn. 11:253. 1870.

Cenangium populneum (Pers. ex Fr.) Rehm.

On *Populus tremuloides* Michx. (trembling aspen) and fallen *Populus* sp. (poplar). Kings Co. Spring, 1935-K.A.H., (KM-1251, 1636-1638 *in* DAOM) (O-4637).

★**Encoeliopsis rhododendri** (Ces. ex Rehm.) Nannf. *in* Nova Acta Reg. Soc. Sci. Upsal., Ser. 4, 8(2):306. 1932.

Stat. conid. *Diplodina eurhododendri* Voss.

On leaves of *Rhododendron smirnowii* Trautr. and wood of other *Rhododendron* species. Kings Co. 7 Sept. 1972-C.O.G. (DAOM 145747, 145750).

Endocronartium harknessii (J.P. Moore) Y. Hiratsuka *in* Can. J. Bot. 47:1493-1494. 1969.

On *Pinus banksiana* Lamb. (jack pine), *P. contorta* Dougl. (shore pine), *P. echinata* Mill. (short-leaf pine) and *P. sylvestris* L. (Scots pine). 1973. (For. Insect Dis. Surv.:29. 1973).

Endodothella junci (Fr.) Theiss. & Syd. *in* Ann. Mycol. 13:586. 1915.

On stems of *Juncus* spp. (rushes). Colchester and Kings Co. 25 June 1926-L.E.W. (W-107, 399).

Endogone pisiformis Link *in* Mag. Ges. Naturforsch. Freunde Berl. 3:33. 1809.

On *Sphagnum* sp. (moss). Colchester and Hants Co. 30 June 1931-L.E.W. (W-341) (KM-1250 *in* DAOM, K.A.H., det. H.T.G. as *E. musicola* Atk.; appears to be this species, sensu L.E.W.).

Endogone pubescens (Sacc. & Ell.) Zycha *in* Krypt. Fl. Mark Brandenb., 6a, Pilze 11:214. 1935.

Sphaerocreas pubescens Sacc. & Ell.

On *Pinus resinosa* Ait. (red pine). 1975-L.P.M., J.M.M.

Enerthenema papillatum (Pers.) Rostaf. *in* Monogr. Mycetozoa App.:28. 1876.

On decayed wood. Colchester Co. 15 July 1931-L.E.W. (W-1049).

Entoloma abortivus (Berk. & Curt.) Donk *in* Bull. Bot. Gard. Buitenzorg 3, 18:157. 1949.

Clitopilus abortivus (Berk. & Curt.) Sacc.

Rhodophyllus abortivus (Berk. & Curt.) Sing.

On deciduous debris. Colchester and Kings Co. 8 Sept. 1931-A.H.S., L.E.W. (W-896) (KM-215, 987, 4101 *in* DAOM, K.A.H.).

Entoloma albogrisea (Pk.) Redhead *in* Agric. Can. Publ. 1112:323. rev. 1979.
Clitopilus alborgrisea Pk.
Rhodophyllus albogriseus (Pk.) Sing.
Under conifers. Colchester Co. 17 July 1931-A.H.S., L.E.W. (W-650).

Entoloma avellaneum (Murr.) Hesler *in Entoloma* in S.E. North Am.:80. 1967.
Nolanea avellanea Murr.
On soil in mixed woods. Annapolis and Kings Co. 1978-K.R.S.Q. (K.S.Q.-44, 45, 63 *in* ACAD).

Entoloma bicolor Murr. *in* North Am. Flora 10:119. 1917.
On soil in coniferous woods. Kings Co. 1978-K.R.S.Q. (K.S.Q.-70 *in* ACAD).

Entoloma clypeatum (L. ex Fr.) Kummer *in* Führ. in Pilzkd.:98. 1871.
Rhodophyllus clypeatus (L. ex Fr.) Quél.
From Kings Co. 1933-K.A.H. (KM-266 in DAOM).

Entoloma conicum (Pk.) Hesler *in Entoloma* in S.E. North Am.:102. 1967.
On soil in woods. Kings Co. 1978-K.R.S.Q. (K.S.Q.-51 *in* ACAD).

Entoloma cyaneum (Pk.) Sacc. *in* Syll. Fung. 5:692. 1887.
Entoloma dichroum (Pers. ex Fr.) Kummer.
Rhodophyllus violaceus (Murr.) Sing.
Solitary on humus under *Acer* sp. (maple), *Fagus* sp. (beech) woods. Colchester Co. 22 Aug. 1931-A.H.S., L.E.W. (W-813).

Entoloma grande (Pk.) Sacc. *in* Syll. Fung. 14:126. 1899.
Under *Abies* spp. (fir). Colchester, Halifax, Hants and Kings Co. 7 July 1931-A.H.S., L.E.W. (W-579, 579a) (KM-268, 532, 2763, 4124, 4128 *in* DAOM, K.A.H.).

Entoloma grayanum (Pk.) Sacc. var. **grayanum** *in* Syll. Fung. 5:698. 1887.
Rhodophyllus grayanus (Pk.) Sing.
On soil Halifax and Kings Co. 19 July 1930-K.A.H. (KM-269, 271, 879, 4125 *in* DAOM).

Entoloma griseum Pk. *in* Bull. N.Y. State Mus. 75:14. 1904.
On moist soil. Colchester and Hants Co. 9 July 1931-A.H.S., L.E.W. (W-595) (KM-4126 *in* DAOM, K.A.H.).

Entoloma lividum (Fr.) Quél. *in* Champ. Jura et Vosges, tab. 6. fig. 1. 1872.
Rhodophyllus lividus (Bull. ex Fr.) Sing.
Rhodophyllus sinuatus (Bull. ex Fr.) Sing.
On humus under *Abies* spp. (fir) and *Picea* spp. (spruce). Colchester and Richmond Co. 4 Sept. 1931-A.H.S., L.E.W. (W-872) (KM-4127 *in* DAOM, K.A.H.).

Entoloma luteum Pk. *in* Annu. Rep. N.Y. State Mus. 54:146. 1901.
Under *Acer* sp. (maple) and *Fagus* sp. (beech) woods. Colchester and Halifax Co. 30 July 1931-A.H.S., L.E.W. (W-715, 715a).

Entoloma madidum (Fr.) Gill. *in* Hymén. Fr., tab. 268. 1874.
On humus in woods of *Picea* sp. (spruce). Colchester Co. 22 Aug. 1931-A.H.S., L.E.W. (W-812).

Entoloma nidorosum (Fr.) Quél. *in* Champ. Jura et Vosges:116. 1872.
Rhodophyllus nidorosus (Fr.) Quél. (1886).
From Kings Co. 30 Aug. 1930-K.A.H. (KM-272 *in* DAOM).

Entoloma porphyrophaeum (Fr.) Karst. *in* Hattsvampar 1:259. 1879.
Rhodophyllus porphyrophaeus (Fr.) Quél.
From Kings Co. 12 Sept. 1931-K.A.H. (KM-273 *in* DAOM).

Entoloma rhodopolium (Fr.) Kummer *in* Führ. in Pilzkd.:98. 1871.
Rhodophyllus rhodopolius (Fr.) Quél.
In mixed woods. Kings Co. 1978-K.R.S.Q. (K.S.Q.-2, 4, 7, 16, 23, 42, 43 *in* ACAD).

Entoloma sericatum (Britz.) Sacc. *in* Syll. Fung. 11:45. 1895.
On needles under *Picea* spp. (spruce). Colchester and Kings Co. 23 July 1931-A.H.S., L.E.W. (W-693, 693a,b) (KM-275 *in* DAOM, K.A.H.).

Entoloma sericellum (Fr.) Quél. *in* Champ. Jura et Vosges, tab 5, fig 5. 1872.
Rhodophyllus sericellus (Bull. ex Fr.) Quél.
Under hardwoods. Colchester Co. 21 July 1931-A.H.S., L.E.W. (W-808).

Entoloma strictius (Pk.) *in* Syll. Fung. 5:698. 1887, var. **strictius.**
Rhodophyllus strictior (Pk.) Sing.
From Kings Co. 2 Sept. 1930-K.A.H. (KM-276, 988 *in* DAOM).

Entoloma sp.
On decaying log in mixed woods. Kings Co. 1978-K.R.S.Q. (K.S.Q. 14 *in* ACAD, as *Rhodophyllus bruneogriseus* nom. prov., *in* Survey of Genus *Rhodophyllus* in N.S., B.Sc. Thesis, Acadia Univ., 1978).

Entoloma sp.
On soil under conifers. Kings Co. 1978-K.R.S.Q. (K.S.Q.-30 coll. H.S., 36 coll. B.J.M., 37 coll. K.A.H., 72 *in* ACAD, as *Rhodophyllus bullateoumbonatus* nom. prov., *in* Survey of Genus *Rhodophyllus* in N.S., B.Sc. Thesis, Acadia Univ., 1978).

Entoloma sp.
On soil in mixed deciduous woods. Annapolis Co. 1978-K.R.S.Q. (K.S.Q. 66 coll. K.A.H. *in* ACAD, as *Rhodophyllus sublividus* nom. prov., *in* Survey of Genus *Rhodophyllus* in N.S., B.Sc. Thesis, Acadia Univ., 1978).

Entomophthora muscae (Cohn) Fr. *in* Bot. Z. 14:882. 1856.
On houseflies. Pictou Co. 1913-A.H.M. (reported as common around Pictou by W.P.F.).

Entomosporium thumenii (Cke.) Sacc. *in* Syll. Fung. 3:657. 1884.
On *Crataegus oxyacantha* L. (English hawthorn). Digby, Hants, Kings, Lunenburg and Victoria Co. 31 July 1938-K.A.H. (O-147, 4497, 5996) (L.E.W.-4014).

★ **Entyloma calendulae** (Oud.) de Bary *in* Oesterr. Bot. Z. 32:105. 1874.
On leaves of *Calendula officinalis* L. (pot marigold). Kings Co. 17 July 1963-K.A.H., C.O.G., D.B.O.S.

Entyloma compositarum Farl. *in* Bot. Gaz. 8:275. 1883.
On *Bidens* sp. (beggar-ticks) 1939-G.L.I.Z.

Entyloma lineatum (Cke.). Davis *in* Trans. Wis. Acad. Sci. Arts Lett. 9:162. 1893.
On *Zizania aquatica* L. (wild rice). Pictou Co. 1913-A.H.M. (DAOM 15238, W.P.F.).

Entyloma nymphaeae (Cunn.) Setch. *in* Bot. Gaz. 19:189. 1894.
On *Nymphaea tuberosa* Paine (white water lily). 1939-G.L.I.Z.

★ **Entyloma polysporum** (Pk.) Farl. *in* Bot. Gaz. 8:275. 1883.
On leaves of *Calendula officinalis* L. (pot marigold). Kings Co. 17 July 1963-K.A.H., D.B.O.S.

Eocronartium muscicola (Fr.) Fitzp. *in* Phytopathology 8:197. 1918.
On *Drepanocladus uncinatus* (Hedw.) Warnst. (moss). Colchester Co. 1 July 1933-L.E.W. (W-1567).

Epicoccum neglectum Desm. *in* Ann. Sci. Nat. Bot., Sér. 2, 17:95. 1842.
On *Zea mays* L. (corn). Yarmouth Co. 26 June 1933-K.A.H., I.L.C.

Epicoccum nigrum Link *in* Mag. Ges. Naturforsch. Freunde, Berl. 7:32. 1815.
Epicoccum purpurascens Ehrenb. ex Schlecht.
On *Solanum tuberosum* L. (potato) and *Zea mays* L. (corn). Kings Co. 15 Aug. 1960-C.O.G.

Erysiphe aggregata (Pk.) Farl. *in* Bull. Bussey Inst. 2:227. 1878.
On *Alnus crispa* (Ait.) Pursh (downy alder), *A. crispa* var. *mollis* Fern. (downy alder) and *A. rugosa* (DuRoi) Spreng. (speckled alder). General. 1909-W.P.F.

Erysiphe cichoracearum DC. ex Mérat *in* Nouv. Flore Env. Paris, 2nd ed. 1:132. 1821.

Powdery mildew on species of *Aster, Begonia, Cucumis sativus* L. (cucumber), *C. melo* L. (melon), *Cucurbita maxima* Duchesne (squash), *Eupatorium maculatum* L. (joe-pye-weed), *Helianthus tuberosus* L. (Jerusalem artichoke), *Myosotis sylvatica* Hoffm. (forget-me-not), *Phlox* sp., *Plantago* spp. (plantain), *Saintpaulia ionantha* Wendl. (Africa violet), *Scutellaria lateriflora* L. (skullcap), *Solidago* spp. (goldenrod) and *Zinnia* sp. General. 30 Sept. 1927-J.F.H. (DAOM 1931, 164950, 170939, 170940).

Erysiphe galeopsidis DC. ex Mérat *in* Nouv. Flore Env. Paris, ed. 2, 1:134. 1821.
On leaves of *Chelone glabra* L. (turtlehead or balmony). Colchester, Digby and Pictou Co. 1909-H.H.M., E.T.P. (L.E.W.-1420, 1682).

Erysiphe graminis DC. ex Mérat *in* Nouv. Flore Env. Paris, ed. 2, 1:133. 1821.
General on *Agropyron repens* (L.) Beauv. (couchgrass), *Hordeum vulgare* L. (barley), *Secale cereale* L. (rye), *Triticum aestivum* L. (wheat) and other grass hosts. 10 July 1925-J.F.H.

Erysiphe polygoni DC. ex St. Aman. *in* Flora Agen.:614. 1821.
On species of *Beta* (beet), *Brassica* (rutabaga), *Clematis* (virgins-bower), *Delphinium* (larkspur), *Lathyrus* (sweet pea), *Lycopersicon* (tomato), *Phaseolus vulgaris (kidney bean), Pisum* (pea), *Polygonum* (knotweed), *Ranunculus* (buttercup and *Trifolium* (clover). General. 1909-H.H.M., E.T.P. (L.E.W.-1423, 1497).

★ **Eudarluca caricis** (Fr.) O. Erikss. *in* Bot. Nat. 119:35. 1966.
Stat. conid. *Sphaerellopsis filum* (Biv.-Bern. ex Fr.) Sutton.
With *Frommea obtusa* (Strauss) Arth. on leaves of *Potentilla canadensis* L. (cinquefoil). Kings Co. 8 Aug. 1951-D.W.C.

Eutypa milliaria (Fr.) Sacc. *in* Syll. Fung. 1:175. 1882.
On decorticated wood of *Acer* sp. (maple), *Alnus* sp. (alder) and *Cornus alternifolia* L.f. (alternate-leaved dogwood). Colchester Co. 2 Sept. 1931-L.E.W. (W-152, 1458).

Eutypa spinosa (Pers.) Tul. *in* Sel. Fung. Carp. 2:59. 1863.
On weathered wood of *Fagus grandifolia* Ehrh. (beech). Colchester Co. 12 Aug. 1931-L.E.W. (W-1284 leg. A.H.S.).

Eutypella alnifraga (Wahl.) Sacc. *in* Syll. Fung. 1:150. 1882.
On *Alnus* spp. (alder). Colchester Co. 1 Aug. 1931-L.E.W. (W-1211, 1781).

★ **Exidia alba** (Lloyd) Burt *in* Ann. Mo. Bot. Gard. 8:366. 1921.
On *Betula lutea* Michx. f. (yellow birch). Kings Co. 26 Nov. 1952-K.A.H. (KM-2082 *in* DAOM, det. D.W.C.).

Exidia glandulosa (Bull.) Fr. *in* Syst. Mycol. 2:224. 1822.
On *Alnus crispa* (Ait.) Pursh var. *mollis* Fern. (downy alder) and *Fagus grandifolia* Ehrh. (beech). Annapolis, Colchester and Kings Co. 1913-A.H.M. (KM-92, 5158 *in* DAOM, K.A.H.) (O-F8499).

Exidia nucleata (Schw.) Burt *in* Ann. Mo. Bot. Gard. 8:371. 1921.
On *Acer* sp. (maple), *Poplus* sp. (poplar) and *Sambucus* sp. (elder). Colchester Co. 19 Aug. 1931-L.E.W. (W-1359) KM-5152 *in* DAOM, K.A.H. det. D.W.C.).

Exidia recisa (S.F. Gray) Fr. *in* Syst. Mycol. 2:223. 1822.
On *Prunus serotina* Ehrh. (black cherry) and *Quercus* sp. (oak). Kings Co. 3 May 1928-K.A.H. (KM-5154 *in* DAOM) (DAOM 95719) (O-F7668).

Exidia saccharina Fr. *in* Syst. Mycol. 2:225. 1822.
On *Pinus resinosa* Ait. (red pine). Kings Co. 20 Nov. 1952-K.A.H. (KM-1703 *in* DAOM).

★ **Exidia villosa** Neuhoff *in* Die Pilze Mitteleuropas 2(2):22. 1935.
On *Betula lutea* Michx. f. (yellow birch). Kings Co. 3 Nov. 1953-K.A.H. (KM-5156 *in* DAOM).

Exidiopsis calcea (Pers.) Wells *in* Mycologia 53:348. 1961.
Corticium abietis (Fr.) Romell.
Sebacina calcea (Pers.) Bres.
On *Picea mariana* (Mill.) BSP. (black spruce) and *Picea* sp. (spruce). Colchester and Kings Co. Aug. 1935-L.E.W. (W-1764 fide H.S.J.) (KM-1866 *in* DAOM, K.A.H. as *S. calcea*).

Exidiopsis grisea (Pers.) Bourd. & Maire *in* Bull. Soc. Mycol. Fr. 36:71. 1920.
Sebacina grisea (Pers.) Bres.
On wood, often corticated. 4 April 1953-K.A.H. (Mycologia 53:341. 1961).

Exidiopsis macrospora (Ell. & Ev.) Wells *in* Mycologia 53:351. 1961.
On *Alnus rugosa* (DuRoi) Spreng. var. *americana* (Regel) Fern. (speckled alder). 26 Oct. 1953-K.A.H.

Exobasidium canadense Savile *in* Can. J. Bot. 37:651. 1959.
On *Rhododendron canadense* (L.) Torr. (*Rhodora canadense* L.) (bull's tongue). Cumberland, Hants and Kings Co. 1 Aug. 1934-H.T.G. (as *E. vaccinii*).

Exobasidium vaccinii (Fckl.) Woron. var. **vaccinii** *in* Naturforsch. Ges. Freiburg Verh. 4:397. 1867.
On *Chamaedaphne calyculata* (L.) Moench var. *angustifolia* (Ait.) Rehd. (leatherleaf), *Gaylussacia baccata* (Wang.) K. Koch (black huckleberry), *Vaccinium angustifolium* Ait. (blueberry), *V. angustifolium* Ait. var. *nigrum* (Wood) Dole, *V. corymbosum* L. (highbush blueberry), *V. macrocarpon* Ait. (cranberry) and *V. myrtilloides* Michx. (blueberry). General. 26 Aug. 1930-J.F.H. (O-3054, 4562) (L.E.W.-1540).

★ **Exosporium caespitosum** Ell. & Barth. *in* J. Mycol.:178. 1902.
On wood of *Betula alba* L. (white birch). Kings Co. 16 Apr. 1953-K.A.H.,D.W.G.

Fabrae maculata Atk. *in* Science (N.S.) 30:452. 1909.
Stat. conid. *Entomosporium maculatum* Lév.
On *Amelanchier canadensis* (L.) Medic. (wild pear), *Crataegus* sp. (hawthorn), *Chaenomeles japonica* Lindl. (Japanese quince) and *Sorbus americana* Marsh. (mountain ash). Digby and Kings Co. 24 July 1928-D.E.M. (O-4989, 5122 det. I.L.C.).

Fabrella tsugae (Farl.) Kirschst. subsp. **tsugae** *in* Hedwigia 80:131. 1941. (Mycologia 54.28. 1962).
On *Tsuga canadensis* (L) Carr. (hemlock). 1975-L.P.M., J.M.M.

Favolus alveolaris (DC. ex Fr.) Quél. *in* Ench. Fung.:185. 1886.
See *Polyporus alveolarius* (Bosc) Fr.

★ **Fayodia bisphaerigera** (Lange) Sing. *in* Ann. Mycol. Berl. 34:331. 1936.
Mycena bisphaerigera (Lange) A.H. Smith (1947).
Omphalia bisphaerigera Lange (1936).
In moss on soil in coniferous woods. Kings. Co. 21 Sept. 1981-E. Hadjisterkoti conf. K.A.H. (ACAD E.H. specimen).

Femsjonia luteo-alba, Fr. *in* Summa Veg. Scand.:341. 1849.
On *Betula lutea* Michx. f. (yellow birch), *Betula* spp. (birch) and *Fagus grandifolia* Ehrh. (beech). Colchester and Kings Co. 5 Sept. 1931-L.E.W. (W-1466a,b) (KM-1093, 1096 *in* DAOM, K.A.H.).

Femsjonia pezizaeformis (Lév.) Karst. *in* Mycol. Fenn. 3:353. 1876.
On *Betula lutea* Michx. f. (yellow birch) and *Fagus grandifolia* Ehrh. (beech). 1975-L.P.M., J.M.M.

Fenestella minor Tul. *in* Sel. Fung. Carp. 2:207. 1863.
On *Alnus* sp. (alder). Colchester Co. 14 July 1931-L.E.W. (W-1017).

Fistulina hepatica Schaeff. ex. Fr. *in* Syst. Mycol. 1:396. 1821.
The beefsteak fungus. 1908-A.H.M. (1st supplementary list).

Flammula alnicola (Fr.) Quél. *in* Mém. Soc. Émul. Montbéliard (2)5 (Champ. Jura et Vosges 1:233):252. 1872.
On *Betula lutea* Michx. f. (yellow birch). 1952. (For. Insect Dis. Surv.:20. 1952).

Flammula decorata (Murr.) Murr., *in* Mycologia 4:262. 1912.
On moss and debris. Colchester Co. 15 July 1931-A.H.S., L.E.W. (W-636).

Flammula lenta (Pers. ex Fr.) Kummer *in* Führ. in Pilzkd.:85. 1882.
See *Pholiota lenta* (Fr.) Sing.

Flammula sapinea (Fr.) Kummer *in* Führ. in Pilzkd.:86. 1882.
See *Gymnopilus sapineus* (Fr.) Maire.

Flammula spumosa (Fr.) Sacc. *in* Syll. Fung. 5:817. 1887.
See *Pholiota spumosa* (Fr.) Sing.

Flammulina velutipes (Curt. ex Fr.) Karst. *in* Symb. Mycol. Fenn. 30, Medd. Soc. Fauna Flora Fenn. 18:62. 1891.
Collybia velutipes (Fr.) Kummer.
On *Ulmus americana* L. (white elm) and other buried wood. Kings Co. 9 Nov. 1932-K.A.H. (KM-245, 529 *in* DAOM).

Fomes annosus (Fr.) Cke. *in* Grevillea 14:20. 1885.
See *Heterobasidion annosum* (Fr.) Bref. Commonw. Mycol. Inst. Descr. Pathol. Fungi Bact.:192).

Fomes conchatus (Pers. ex Fr.) Gill. *in* Hymén. Fr. 1:685. 1878.
See *Phellinus conchatus* (Pers. ex Fr.) Quél.

Fomes connatus (Weinm.) Gill. *in* Hymén. Fr. 1:684. 1878.
See *Oxyporus populinus* (Schw. ex Fr.) Donk.

Fomes fomentarius (L. ex Fr.) Kickx *in* Flore Crypt. Flandres 2:237. 1867.
On *Acer pensylvanicum* L. (striped maple), *A. saccharum* Marsh. (sugar maple), *Betula lutea* Michx. f. (yellow birch), *B. papyrifera* Marsh. (white birch), *B. populifolia* Marsh. (wire birch), *Fagus grandifolia* Ehrh. (beech), *Populus grandidentata* Michx. (largetooth aspen) and other species of *Acer* and *Populus*. General, 1880-J.S. (L.E.W.-13, 57, 1053 coll. A.R.P.) (KM-18 *in* DAOM, K.A.H.).

Fomes igniarius (L. ex Fr.) Kickx *in* Flore Crypt. Flandres 2:237. 1867.
See *Phellinus igniarius* (L. ex Fr.) Quél.

Fomes pini (Thore ex Fr.) Karst. *in* Hattsvampar 2:79. 1882.
See *Phellinus pini* (Brot. per Fr.) Bond. & Sing.

Fomes pinicola (Swartz ex Fr.) Cke. *in* Grevillea 14:17. 1885.
See *Fomitopsis pinicola* (Schw.) Karst.

Fomes ribis (Schum ex Fr.) Gill. *in* Hymén. Fr. 1:685. 1878.
See Phellinus ribis (Schum. ex Fr.) Quél.

Fomes scutellatus (Schw.) Cke. *in* Grevillea 14:19. 1885.
See *Fomitopsis scutellata* (Schw.) Bond. & Sing.

Fomitopsis cajanderi (Karst.) Kotl. & Pouz. *in* Ceská Mykol. 11:157. 1957.
Fomes cajanderi Karst.
Fomes subroseus (Weir) Overh.
On *Abies balsamea* (L.) Mill. (balsam fir), *Picea glauca* (Moench) Voss (white spruce), *Tsuga canadensis* (L.) Carr. (hemlock) and other species of *Picea*. General. 1908-A.H.M. (KM-24, 24b, 747, 4217 *in* DAOM, K.A.H.) (L.E.W.-399, 1507).

Fomitopsis pinicola (Schw.) Karst. *in* Medd. Soc. Fauna Flora Fenn. 6:9. 1881.
Fomes pinicola (Swartz ex Fr.) Cke.
On *Abies balsamea* (L.) Mill. (balsam fir), *Betula lutea* Michx. f. (yellow birch),

B.papyrifera Marsh. (white birch), *Fagus grandifolia* Ehrh. (beech), *Picea glauca* (Moench) Voss (white spruce), *P. mariana* (Mill.) BSP. (black spruce), *P. rubens* Sarg. (red spruce), *Populus tremuloides* Michx. (trembling aspen), *Tsuga canadensis* (L.) Carr. (hemlock) and other species of *Betula, Malus,* (apple), *Picea, Pinus* (pine) and *Populus*. 1908-A.H.M. (KM-20, 51, 1270 *in* DAOM, K.A.H.) (O-F2197) (L.E.W.-34, 6255, 6258 coll. A.R.P.).

Fomitopsis rosea (Alb. & Schw. ex Fr.) Karst. *in* Medd. Soc. Fauna Flora Fenn. 6:9. 1881.
Fomes roseus (Alb. & Schw. ex Fr.) Cke.
Polyporus roseus Alb. & Schw. ex Fr.
On *Picea rubens* Sarg. (red spruce) and other *Picea* species. Kings Co. and others. 1950-L.E.W. (O-F2202, 3087) (KM-5237 *in* DAOM, K.A.H.).

Fomitopsis scutellata (Schw.) Bond. & Sing. *in* Ann. Mykol. 39:55. 1941.
Fomes scutellatus (Schw.) Cke.
Polyporus scutellatus Schw.
On *Alnus crispa* (Ait.) Pursh var. *mollis* Fern. (downy alder), *A. rugosa* (DuRoi) Spreng. var *americana* (Regel) Fern. (speckled alder) and *Alnus* sp. Annapolis and Colchester Co. 27 June 1931-L.E.W. (W-305, 1508) (KM-4270 *in* DAOM, K.A.H. det. R.M.).

Frommea obtusa (Strauss) Arth. *in* Bull. Torrey Bot. Club 44:503. 1917.
On *Potentilla canadensis* L. (five-fingered jack) and *P. simplex* Michx. (old field cinquefoil). Annapolis, Colchester, Kings and Pictou Co. 1913-W.P.F. (O-4936, 7741).

Fuligo muscorum Alb. & Schw. *in* Consp. Fung.:86. 1805.
On moss. Colchester Co. 1 Sept. 1931-L.E.W. (W-1486).

Fuligo septica (L.) Wiggers *in* Prim. Fl. Holsat. 112. 1780.
On various substrata. General. 1882-J.S. (A.H.M.) (L.E.W.-186, 450, 1028, 1052, 1391 as *F. septica* var. *laevis* Pers.).

Fulvia fulva (Cke.) Cif. *in* Atti Ist. Bot. Univ. Lab. Critt. Pavia, Ser. 5, 10:245-246. 1954.
Cladosporium fulvum Cke.
On *Lycopersicon esculentum* Mill. (tomato). 1924. (Can. Plant Dis. Surv. 4:58. 1924).

Funalia gallica (Fr.) Bond. & Sing. *in* Ann. Mykol. 39:62. 1941.
Trametes hispida Bagl.
On *Populus* sp. (poplar). Colchester Co. 3 July 1931-L.E.W. (W-361).

Funalia trogii (Berk. apud Trog) Bond. & Sing. *in* Ann. Mykol. 39:62. 1941.
Trametes trogii Berk.
On *Populus* sp. (poplar) and *Salix* sp. (willow). Kings Co. 1953. (For. Insect Dis. Surv.:27. 1953) (KM-3103, 3104 *in* DAOM, K.A.H.).

★**Fusarium aquaeductuum** Lagerh. *in* Z. Parasitkd. 2:655. 1891, var. **medium** aggr. Booth *in* The Genus *Fusarium*:60. 1971.
In polluted water, clogging pipes and submersible pump at 24-meter depth in bored well. Kings Co. 29 June 1978-C.O.G. (DAOM 169250 coll. R.S., det. G.A.N.).

Fusarium avenaceum (Cda. ex Fr.) Sacc. *in* Syll. Fung. 4:713. 1886.
See stat. perf. *Gibberella avenacea* Cook.

★**Fusarium coeruleum** (Lib.) Sacc. *in* Syll. Fung. 4:705. 1886.
Fusarium solani (Mart.) Sacc. var. *coeruleum* (Sacc.) Booth.
On tuber of *Solanum tuberosum* L. (potato). Kings Co. 5 May 1963-C.O.G., W.L.G.

Fusarium culmorum (W.G. Smith) Sacc. *in* Syll. Fung. 11:651. 1895.

General on *Triticum* sp. (wheat). 1938-J.F.H.

Fusarium equiseti (Cda) Sacc. *in* Syll. Fung. 4:707-708. 1886.
See stat. perf. *Gibberella intricans* Wollenw.

Fusarium graminearum Schw. *in* Fl. Anhaltina 2:285. 1838.
See stat. perf. *Gibberella zeae* (Schw.) Petch.

Fusarium lateritium Nees *in* Syst. Pilze Schwämme:31. 1817; Link, Sp. Plant 6(2): 106. 1824; emend. Snyder & Hansen *in* Am. J. Bot. 32:664. 1945 pro parte.
See stat perf. *Gibberella baccata* (Wallr.) Sacc.

Fusarium nivale (Fr.) Ces. *in* Rabenhorst, Herb. Mycol., ed. 1, 1439. 1850.
See *Gerlachia nivalis* (Ces. ex Sacc.) W. Gams & E. Müller var. *nivalis.*

Fusarium oxysporum Schl. *in* Flora Berol. 2:139. 1824, emend. Snyder & Hansen pro parte. Am. J. Bot. 27:64. 1940.
From *Hordeum vulgare* L. (barley) and *Lupinus hirsutus* L. (blue lupine). Kings Co. 1936-W.L.G. (DAOM 149425, 149426 on barley, C.O.G., R.A.S.).

Fusarium oxysporum Schl. f. sp. **betae** (Stewart) Snyder & Hansen *in* Am. J. Bot. 27:66. 1940.
On *Beta vulgaris* L. (beet, mangel). Kings Co. 1942-W.L.G.

Fusarium oxysporum Schl. f. sp. **callistephi** (Beach) Snyder & Hansen *in* Am. J. Bot. 27:66. 1940.
Wilt of *Callistephus chinensis* Nees (China aster). Kings Co. 1938-J.F.H.

Fusarium oxysporum Schl. f. sp. **cepae** (Hanz.) Snyder & Hansen *in* Am. J. Bot. 27:66. 1940.
On *Allium cepa* L. (onion). Kings Co. 1943-J.F.H.

Fusarium oxysporum Schl. f. sp. **chrysanthemi** G.M. & J.K. Armstrong & Littrell *in* Phytopathology 60:498. 1970.
On roots of *Tagetes erecta* L. (marigold). Kings Co. 25 June 1974-C.O.G.

Fusarium oxysporum Schl. f. sp. **conglutinans** (Wollenw.) Snyder & Hansen *in* Am. J. Bot. 27:66. 1940.
On *Brassica* spp. (cabbage, cauliflower, rutabaga, etc.), *Aster,* etc. Annapolis and Kings Co. 24 July 1935-J.F.H.

★**Fusarium oxysporum** Schl. f. sp. **gladioli** (Massey) Snyder & Hansen *in* Am. J. Bot. 27:66. 1940.
On corms of *Gladiolus hortulanus* Bailey (gladiolus). Kings Co. 18 Nov. 1963-K.A.H., W.C.M., C.O.G.

Fusarium oxysporum Schl. f. sp. **lycopersici** (Sacc.) Snyder & Hansen *in* Am. J. Bot. 27:66. 1940.
Causing wilt of *Lycopersicon esculentum* Mill. (tomato). Cape Breton Co. 24 July 1942-J.F.H.

★**Fusarium oxysporum** Schl. f. sp. **phaseoli** Kendrick & Snyder *in* Phytopathology 32:1010-1014. 1942.
Causing dry root rot of *Phaseolus vulgaris* L. (kidney bean or pole bean). Kings Co. 21 June 1960-K.A.H.

Fusarium oxysporum Schl. f. sp. **pisi** (van Hall) Snyder & Hansen *in* Am. J. Bot. 27:66. 1940.
Root rot of *Pisum sativum* L. (garden pea). Kings and Annapolis Co. 13 July 1939-D.W.C., W.L.G.

★**Fusarium oxysporum** Schl. f. sp. **spinaciae** (Sherb.) Snyder & Hansen *in* Am. J. Bot. 27:66. 1940.
Root rot of *Spinacia oleracea* L. (spinach). Kings Co. 10 June 1974-C.O.G.

Fusarium poae (Pk.) Wollenw. *in* Bull. Me. Agric. Exp. Stn. 219:254-258. 1913.
From head blight of *Hordeum vulgare* L. (barley), on husks of nuts from *Juglans nigra* L. (black walnut) and from *Rhododendron.* General 1950-L.E.W. (barley,

DAOM 5095, 5096, 5480, W.L.G.) (rhododendron, DAOM 145905, 145906, R.A.S., C.O.G.).

Fusarium sambucinum Fckl. var. **sambucinum** *in* Symb. Mycol.:167. 1869.
See stat. perf. *Gibberella pulicaris* (Fr.) Sacc.

Fusarium sambucinum Fckl. var. **coeruleum** Wollenw. *in* Ann. Mycol. 15:55. 1917.
See stat. perf. *Gibberella pulicaris* var. *minor* Wollenw.

Fusarium solani (Mart.) Sacc. *in* Michelia 2:296. 1881, emend Snyder & Hansen pro. parte *in* Am. J. Bot. 28:740. 1941.
See stat. perf. *Nectria haematococca* Berk. & Br.

Fusarium solani (Mart.) Sacc. f. sp. **phaseoli** (Burk.) Snyder & Hansen *in* Am. J. Bot. 28:740. 1941.
Root rot of *Phaseolus vulgaris* L. (bean). Kings Co. 5 June 1936-J.A.B.

Fusarium solani (Mart.) Sacc. f. sp. **pisi** (Jones) Snyder & Hansen *in* Am. J. Bot. 28:740. 1941.
From *Pisum sativum* L. (garden pea). Kings Co. 22 July 1946-K.A.H.

Fusarium sulphureum Schlecht. *in* Flora Berol.:139. 1824.
Fusarium sambucinum Fckl. f. 6 Wollenw.
See stat. perf. *Gibberella cyanogena* (Desm.) Sacc.

Fuscoboletinus glandulosus (Pk.) Pomerleau & Smith *in* Brittonia 14:162. 1962.
Boletinus glandulosus Pk.
Suillus glandulosus (Pk.) Sing.
Under mixed confiers and on *Thuja occidentalis* L. (white cedar). Antigònish, Guysborough, Hants and Kings Co. 14 Aug. 1953-K.A.H. (KM-2424, 2982, 2983, 3775-3779 *in* DAOM) (ACAD 11194, D.W.G., K.A.H.).

Fuscoboletinus paluster (Pk.) Pomerleau *in* Mycologia 56:708. 1964.
Boletinus paluster (Pk.) Pk.
Boletus paluster Pk.
Under *Larix laricina* (DuRoi) K. Koch (larch). Colchester, Halifax, Pictou, Richmond, Shelburne and Victoria Co. 1881-J.S. (L.E.W.-712) (KM-3726, 3727, 5356 *in* DAOM, K.A.H.) (ACAD 11216, D.W.G., K.A.H.).

Fuscoboletinus serotinus (Frost) Smith & Thiers *in* Boletes of Mich.:85. 1971.
Boletus serotinus Frost.
Under *Larix laricina* (DuRoi) K. Koch (larch). Guysborough and Kings Co. 1976-D.W.G., K.A.H. (MICH 8247, K.A.H.).

Fuscoboletinus sinuspaulianus Pomerleau & Smith *in* Brittonia 14:165. 1962.
Suillus sinuspaulianus (Pomerleau & Smith) Dick & Snell.
On ground. 1975-L.P.M., J.M.M.

Fuscoboletinus viscidus (L. ex Fr. & Hök) Grund & Harrison *in* Nova Scotian Boletes:134. 1976.
Boletus aeruginascens Secr.
Boletus viscidus L. ex Fr. & Hök.
Fuscoboletinus aeruginascens (Secr.) Pomerleau & Smith.
Suillus aeruginascens (Secr.) Snell.
Under conifers. Antigonish, Colchester and Kings Co. 8 July 1931-A.H.S., L.E.W. (KM-1744, 2969, 3735, 3736 *in* DAOM, K.A.H.) (ACAD 11164, D.W.G., K.A.H.).

Fusicoccum abietinum (Hart.) Prill. & Del. *in* Bull. Soc. Mycol. Fr. 6:98. 1890.
Phoma abietina Hartig.
Phomopsis abietina Wils. & Hahn.
On *Abies balsamea* (L.) Mill. (balsam fir). 1958. (For. Insect Dis. Surv.:27. 1958.

Fusicoccum amygdali Delacr. *in* Bull. Soc. Mycol. Fr. 21:180-185. 1905.
In wood cankers of *Prunus persica* (L.) Batsch (peach). Annapolis, Digby and Kings Co. 30 June 1966-C.O.G.

Fusicoccum obtusulum (Died.) Grove *in* Br. Stem and Leaf Fungi 1:246. 1935.
On *Acer* sp. (maple). 1975-L.P.M., J.M.M.

Gaeumannomyces graminis (Sacc.) v. Arx & Oliver *in* Trans. Br. Mycol. Soc. 35:29. 1952, var. **tritici** Walker *in* Trans. Br. Mycol. Soc. 58:439. 1972.
Mycol. Soc. 58:439. 1972.
Ophiobolus graminis Sacc.
On basal parts of culms of *Triticum aestivum* L. (wheat). Digby Co. 8 July 1954-K.A.H., D.W.C.

Galera ovalis (Fr.) Gill *in* Hymén. Fr.:554. 1876.
Agaricus ovalis Fr.
On cattle dung. Halifax Co. 1880-J.S. (A.H.M.).

Galerina hypnorum (Schrank ex Fr.) Kühner *in* Encycl. Mycol. 7:194. 1935.
Galera hypnorum (Fr.) Kummer.
Galerula hypnorum (Fr.) Atk.
From Halifax Co. 1908-A.H.M. (J.S.).

★ **Galerina lateritia** (Murr.) Sing. *in* Tr. Bot. Inst. Akad. Nauk S.S.S.R., Ser. 2(6):466. 1950.
On rotten wood. Kings Co. 27 May 1981-K.A.H. (ACAD 13639).

Galerina leucobryicola Smith & Sing. *in* Monogr. on the Genus *Galerina* Earle:177. 1964.
From Annapolis Co. 29 Aug. 1953-J.W.G.

Galerina tibiicystis (Atk.) Kühner *in* Encycl. Mycol. 7:176. 1935.
On sphagnum bogs. Kings Co. 2 Sept. 1953-J.W.G. (*in* Monogr. on the Genus *Galerina* Earle).

Galerina vittaeformis (Fr.) Sing. *in* Tr. Bot. Inst. Akad. Nauk S.S.S.R., Ser. 2(6):472. 1950.
On mossy logs in coniferous wood. 1964-A.H.S., R.S. (*in* Monogr. on the Genus *Galerina* Earle).

★ **Galiella rufa** (Schw.) Nannf. & Korf *in* Korf, Mycologia 49:108. 1957.
Bulgaria rufa Schw. (basionym).
On fallen limb of hardwood. Queens Co. 24 July 1981-K.A.H. (ACAD 13800 coll. Ken J. Harrison).

Ganoderma applanatum (Pers. ex S.F. Gray) Pat. *in* Bull. Soc. Mycol. Fr. 5:67. 1889.
See *Elfvingia megaloma* (Lév.) Murr.

Ganoderma lucidum (Leyss. ex Fr.) Karst. *in* Rev. Mycol. 3:17. 1881.
On *Abies balsamea* (L.) Mill. (balsam fir), *Acer rubrum* L. (red maple), *Pinus strobus* L. (white pine), *Tsuga canadensis* (L.) Carr. (hemlock), species of *Picea* (spruce), *Tsuga* and other coniferous wood. General. 1950-V.J.N.

Ganoderma tsugae Murr. *in* Bull. Torrey Bot. Club 29:601. 1902.
Polyporus tsugae (Murr.) Overh.
On logs and stumps of *Picea* sp. (spruce), *Tsuga* sp. (hemlock) and other conifers. General. 8 Aug. 1929-L.E.W. (W-247) (KM-746, 796, 1269 *in* DAOM, K.A.H.) (O-F2203, 5978, 8131) (See Donk M.A., 1974. Check List of European Polypores, p. 70 for note on this species).

Gautieria graveolens (Trog) Zeller & Dodge *in* Ann. Mo. Bot. Gard. 21:695. 1937. var. *otthii*.
Gautieria otthii Trog.
From Kings Co. 1977-S.F.M. (ACAD S.F. 24) (S.F.M.-405 *in* ACAD).

★ **Gelasinospora tetrasperma** Dowd. *in* Can. J. Res. 9:294. 1933.
On fruit of *Vaccinium vitis-idaea* L. var. *minus* Lodd. (foxberry). Kings Co. Isolated at Kentville from fruit collected at Pouch Cove, Newfoundland, 12 Sept. 1977-M.P.C., C.O.G., I.V.H. (DAOM 166743).

Gelatinosporium abietinum Pk. *in* Annu. Rep. N.Y. State Mus. 25:84. 1873.
Foveostroma abietinum (Pk.) Di Cosmo.
See stat. perf. *Dermea balsamea* (Pk.) Seav.

Gelatinosporium fulvum Pk. *in* Annu. Rep. N.Y. State Mus. 38:97. 1885.
See stat. perf. *Dermea molliuscula* (Schw.) Cash.

Geoglossum affine (Durand) Lloyd *in* Mycol. Writ. 5, Geoglossaceae:9. 1916.
In mossy creek bottom. Cumberland Co. 29 Aug. 1931-L.E.W. (W-1436, leg. A.H.S.) (KM-1534 *in* DAOM, K.A.H.).

Geoglossum difforme Fr. *in* Syst. Mycol. 1:489. 1821.
On duff and humus in woods. Colchester, Cumberland, Hants and Kings Co. 22 Aug. 1931-L.E.W. (W-1386a,b) (KM-1014, 1015, 1047-1050 *in* DAOM, K.A.H.) (ACAD 1014a,b, K.A.H.).

Geoglossum fallax Durand *in* Ann. Mycol. 6:428. 1908.
On moss under hardwoods. Inverness Co. 6 Aug. 1931-L.E.W. (W-1219).

Geoglossum glabrum Pers. ex Fr. *in* Syst. Mycol. 1:488. 1821, var. **americanum** Mains *in* Mycologia 46:600. 1954.
On soil, humus and mosses. General. 5 Sept. 1925-L.E.W. leg. A.R.P. (W-1130a,b, 1159, 6109, 6111) (KM-1009, 1053 *in* DAOM, K.A.H.) (ACAD 1009, 1010a, 1011a,b, K.A.H.).

Geoglossum glutinosum Pers. ex Fr. *in* Syst. Mycol. 1:489. 1821.
On soil and humus. Colchester, Hants and Kings Co. 21 Aug. 1931-L.E.W. (W-1381, leg. A.H.S.) (KM-1016, 1054, 1055a *in* DAOM, K.A.H.) (ACAD 1016a,b,c,d, K.A.H.).

Geoglossum intermedium Durand *in* Ann. Mycol. 6:431. 1908.
From Kings Co. 6 Sept. 1931-K.A.H. (KM-1008 *in* KAOM) (ACAD 1008).

Geoglossum simile Pk. *in* Bull. Buffalo Soc. Nat. Sci. 1:70. 1873.
On humus rotten wood and in sphagnum and other mosses. 1954-E.B.M. (Mich. Herb.; Mycologia 46:603. 1954).

Geoglossum umbratile Sacc. *in* Michelia 1:444. 1878.
Geoglossum nigritum (Fr.) Cook var. *nigritum*.
On soil. General. 18 Aug. 1927-L.E.W. (W-6099 leg. A.R.P., A.H.S., 1363) (KM-1013, 1051, 1056, 1057, 1529-1533 *in* DAOM, K.A.H.) (ACAD 1013a,b,c,d, K.A.H.).

Geopyxis catinus (Holmsk.) Sacc. *in* Syll. Fung. 8:71. 1889.
See *Pustulina catinus* (Holmsk. ex Fr.) Eckbl.

Geopyxis cupularis (L.) Sacc. *in* Syll. Fung. 8:72. 1889.
See *Pustulina cupularis* (L. ex Fr.) Eckbl.

★**Geotrichum candidum** Link ex Pers. emend. Carmichael *in* Mycologia 49:823. 1957.
From milled peat, *Sphagnum* sp. Kings Co. 1961-C.O.G., W.B.K.

Gerlachia nivalis (Ces. ex Sacc.) W. Gams & E. Müller var. **nivalis** *in* Neth. J. Plant Pathol. 86:49. 1980.
Fusarium nivale Ces. ex Sacc. (basionym).
See stat. perf. *Monographella nivalis* (Schaff.) E. Müller var. *nivalis*.

Gerronema chrysophyllum (Fr.) Sing. *in* Mycologia 51:380. 1959 (1960).
Agaricus chrysophyllum Fr.
Armillariella chrysophylla (Fr.) Sing. (1951).
Clitocybe chrysophylla Fr.
On rotten log. Kings Co. 9 Aug. 1936-K.A.H. (KM-2043 *in* DAOM as *C. chrysophylla* det. H.E.B.).

Gerronema fibula (Bull. ex Fr.) Sing. *in* Publ. Inst. Micol. Univ. Recife, 304:13. 1961.

Mycena fibula (Bull. ex Fr.) Kühner (1938).
Omphalia fibula (Bull. ex Fr.) Quél.
On moss. Colchester, Halifax and Kings Co. 1881-J.S. (L.E.W.-566, 567) (KM-943 *in* DAOM, K.A.H.).

Gerronema setipes (Fr.) Sing. *in* Sydowia 15:51. 1961 (sensu Ricken).
Crinipellis setipes (Pk.) Sing.
Marasmius setipes (Pk.) Atk. & House.
In moss under conifers. Kings Co. 30 Aug. 1968-K.A.H. (MICH 7815).

★**Gibbera cassandrae** (Pk.) Barr *in* Can. J. Bot. 39:313. 1961.
On *Arctostaphylos uva-ursi* (L.) Spreng. (bearberry), *Gaultheria procumbens* L. (teaberry) and *Pyrola elliptica* Nutt. (shinleaf). Queens and Shelburne Co. 16 June 1953-J.F.H., C.O.G.

Gibbera compacta (Pk.) Shear *in* U.S. Dep. Agric. Tech. Bull. 258:13. 1931.
See *Stigmea conferta* (Fr.) Fr.

Gibbera gaultheriae (Ell. & Ev.) Barr *in* Can. J. Bot. 46:841. 1968.
Venturia gaultheriae Ell. & Ev.
On leaves of *Gaultheria procumbens* L. (teaberry). Colchester Co. 14 July 1929-L.E.W. (W-48).

Gibbera kalmiae (Pk.) Barr *in* Can. J. Bot. 39:315. 1961.
Leptosphaeria kalmiae Pk.
On *Kalmia angustifolia* L. (lambkill). Colchester Co. 7 Aug. 1933-L.E.W. (W-1616, 1621).

Gibberella avenacea Cook *in* Phytopathology 57:732-736. 1967.
Stat. conid. *Fusarium avenaceum* (Cda. ex Fr.) Sacc.
From *Avena* sp. (oat), *Glycine max* (L.) Merr. (soybean), *Hordeum* sp. (barley), *Triticum* sp. (wheat) and other ornamental and cultivated plants. Kings Co. 1937-J.F.H. (DAOM 171075, soybean).

★**Gibberella baccata** (Wallr.) Sacc. *in* Syll. Fung. 2:553. 1883.
Stat. conid. *Fusarium lateritium* Nees.
Causing small pit type lesions (3-5 mm diam.) on fruit of *Malus pumila* Mill. (apple) and fruit rot of *Pyrus communis* L. (pear). Annapolis and Kings Co. 21 July 1974-C.O.G., R.G.R., R.A.S., G.A.N. (DAOM 149895, 169042).

Gibberella cyanogena (Desm) Sacc. *in* Syll. Fung. 2:555. 1883.
Stat. conid. *Fusarium sulphureum* Schlecht.
Fusarium sambucinum Fckl. f. 6, Wollenw.
From decayed stems of *Satureja hortensis* L. (summer savory) and from tuber of *Solanum tuberosum* L. (potato). Kings and Lunenburg Co. 5 May 1963-C.O.G., R.A.S., W.L.G. (DAOM 166631).

Gibberella intricans Wollenw. *in* Z. Parasitkd. 3(3):332. 1931.
Stat. conid. *Fusarium equiseti* (Cda) Sacc.
From *Brassica oleracea* L. var. *gemmifera* Zenker (Brussels sprouts), *Cucumis sativus* L. (cucumber) and subcrown internodes of *Hordeum vulgare* L. (barley). Kings Co. 3 May 1954-K.A.H.

Gibberella pulicaris (Fr.) Sacc. var. **pulicaris** *in* Michelia 1:43. 1877.
Stat. conid. *Fusarium sambucinum* Fckl.
Storage rot of *Solanum tuberosum* L. (potato) and *Daucus carota* L. var. *sativa* DC. (carrot). Kings Co. January 1958-K.A.H., C.O.G.

Gibberella pulicaris (Fr.) Sacc. var. **minor** Wollenw. *in* Z. Parasitkd. 3:356. 1931.
Stat. conid. *Fusarium sambucinum* Fckl. var. *coeruleum* Wollenw.
From crown of *Fragaria* sp. (cultivated strawberry). Kings Co. 14 May 1963-C.O.G., W.L.G.

Gibberella zeae (Schw.) Petch *in* Ann. Mycol. 34:260. 1936.
Stat. conid. *Fusarium graminearum* Schw.
On *Avena sativa* L. (oat), *Hordeum vulgare* L. (barley), *Triticum aestivum* L. (wheat), *Trifolium repens* L. (white clover) and *Zea mays* L. (corn). General. 7 June 1937-J.F.H.

Gibberidea abundans (Dobr.) Shear *in* Mycologia 29:361. 1937.
On *Lycopus americanus* Mühl. (water-horehound), *Prunella vulgaris* L. (self-heal or heal-all) and on dead stems of various *Labiatae* sp. (mint). Colchester and Kings Co. 26 June 1926-L.E.W. (P373, W-1400).

Gibberidea alnea (Pk.) Wehm. *in* Can. J. Res. C, 20:586. 1942.
Cucurbitaria alnea Pk.
On stems of *Alnus* sp. (alder). Colchester Co. 12 July 1929-L.E.W. (W-180).

Gliocladium atrum Gilman & Abbott *in* Iowa State Coll. J. Sci. 1:305. 1927.
From soil. Cumberland Co. 1980-D.B., A.T.

Gliocladium catenulatum Gilman & Abbott *in* Iowa State Coll. J. Sci. 1:303. 1927.
Isolated from soil. Cumberland Co. 1971-D.B. et al.

Gliocladium deliquescens Sopp *in* Monogr. Penicill. Norw.:89. 1912.
From soil. Cumberland Co. 1980-D.B., A.T.

Gliocladium roseum (Link) Bain. *in* Bull. Soc. Mycol. Fr. 23:111. 1907.
See stat. perf. *Nectria gliocladioides* Smalley & Hansen.

★**Gliocladium viride** Matr. *in* Bull. Soc. Mycol. Fr. 9:249. 1893.
From tuber of *Solanum tuberosum* L. (potato). Kings Co. 18 Sept. 1969-C.O.G.

★**Gliomastix muorum** (Cda.) Hughes var. **muorum** *in* Can. J. Bot. 36:769. 1958.
From roots of *Fragaria* sp. (cultivated strawberry). Cumberland Co. 20 May 1971-C.O.G.

★**Gliomastix muorum** (Cda.) Hughes var. **felina** (Marchal) Hughes *in* Can. J. Bot. 36:769. 1958.
Gliomastix felina (Marchal) Hammill (Mycologia 73:231. 1981).
On calyx of *Fragaria* sp. (cultivated strawberry). Kings Co. 25 July 1962-C.O.G.

★**Gloeocystidiellum citrinum** (Pers.) Donk *in* Fungus 26:9. 1956.
Corticium radiosum Fr.
On *Abies balsamea* (L.) Mill. (balsam fir), *Fagus grandifolia* Ehrh. (beech), *Picea* sp. (spruce) and *Tsuga* sp. (hemlock). Kings Co. 31 Oct. 1952-K.A.H. (KM-1827 *in* DAOM).

Gloeocystidiellum leucoxanthum (Bres.) Boid. *in* C.R. Acad. Sci. Paris 233:825. 1951.
Corticium leucoxanthum Bres.
On *Acer saccharum* Marsh. (sugar maple). Colchester Co. 15 July 1929-L.E.W. (W-58 det. M.A.D.).

Gloeocystidiellum porosum (Berk. & Curt.) Donk *in* Meded. Ned. Mycol. Verh. 18-20:156. 1931.
Corticium porosum Berk. & Curt.
On wood and bark of *Alnus* sp. (alder). Colchester Co. Aug. 1935-L.E.W. (W-1782 det. H.S.J. as *C. porosum*).

Gloeodes pomigena (Schw.) Colby *in* Trans. Ill. Acad. Sci. 13:158. 1920.
Phyllachora pomigena (Schw.) Sacc.
Causing sooty blotch on fruit of *Malus* sp. (apple), *Prunus domestica* L. (plum) and *Pyrus* sp. (pear). Annapolis, Digby, Hants and Kings Co. Sept. 1930-J.F.H.

Gloeophyllum abietinum (Bull. ex Fr.) Karst. *in* Hattsvampar 2:79. 1882.
Daedalea abietina Bull. ex Fr.
Lenzites abietina (Bull. ex Fr.) Fr.
On *Larix laricina* (DuRoi) Koch (larch). Halifax and Pictou Co. 1908-A.H.M.

(may have been *Lenzites sepiaria* (Wulf. ex Fr.) Fr. fide L.E.W.).

Gloeophyllum protractum (Fr.) Imaz. *in* Bull. Tokyo Sci. Mus. 6:75. 1943.
Trametes americana Overh.
On *Picea* sp. (spruce). Kings Co. 4 Nov. 1933-K.A.H. (KM-115 *in* DAOM) (O-F5500).

Gloeophyllum sepiarium (Wulf. ex Fr.) Karst. *in* Hattsvampar 2:79. 1882.
Daedalea sepiaria Wulf. ex Fr.
Lenzites sepiaria (Wulf. ex Fr.) Fr.
On *Abies balsamea* (L.) Mill. (balsam fir), *Picea glauca* (Moench) Voss (white spruce), *P. mariana* (Mill.) BSP. (black spruce), *P. rubens* Sarg. (red spruce), *Pinus strobus* L. (white pine), *Populus tremuloides* Michx. (trembling aspen), *Prunus* sp. (cherry or plum) and *Tsuga canadensis* (L.) Carr. (hemlock). General. 1881-J.S. (A.H.M.) (L.E.W.-34, 309 and 6164 coll. A.R.P.) (KM-3113, *in* DAOM, K.A.H.).

Gloeoporus dichrous (Fr.) Bres. *in* Ann. Mycol. 10:506. 1912.
Polyporus dichrous Fr.
On *Fagus grandifolia* Ehrh. (beech), *Picea* sp. (spruce), *Pinus* sp. (pine), *Populus* sp. (poplar), *Ulmus* sp. (elm) and other coniferous and deciduous wood. Annapolis, Colchester, Halifax and Kings Co. 6 Aug. 1933-K.A.H. (KM-102, 4251-4253 *in* DAOM).

Gloeoporus pannocinctus (Rom.) Erikss. *in* Symb. Bot. Upsal. 16(1):136. 1958.
Poria pannocincta (Rom.) Lowe.
On *Betula lutea* Michx. f. (yellow birch). 1975-L.P.M., J.M.M.

Gloeosporidiella ribis (Lib.) Petrak *in* Hedwegia 62:318. 1921.
Gloeosporium ribis (Lib.) Mont. & Desm.
See stat. perf. *Drepanopeziza ribis* (Kleb.) Höhn.

Gloeosporidiella variabilis (Laub.) Nannf. *in* Nova Acta Reg. Soc. Sci. Upsal., Ser. 4, 8:171. 1932.
Gloeosporium variabile Laub.
Gloeosporidella variabilis (Laub.) v. Arx.
See stat. perf. *Drepanopeziza variabilis* Müller, Hütter & Schüpp.

Gloeosporium album Osterw. *in* Zentralbl. Bakt. 2(18):826. 1907.
See *Phlyctaena vagabunda* Desm.

Gloeosporium alni Ell. & Ev. *in* Field Columb. Mus. 9:123. 1896.
See *Monostichella alni* (Ell. & Ev.) v. Arx.

Gloeosporium betulicola Sacc. & Dearn. *in* Ann. Mycol. 13:125. 1915.
See *Discula betulina* (Westend.) v. Arx.

Gloeosporium cinerescens Bubák *in* Ann. Mycol. 2:399. 1904.
See *Cryptocline cinerescens* (Bubák) v. Arx.

Gloeosporium coryli (Desm.) Sacc. *in* Michelia 2:117. 1880.
See *Monostichella coryli* (Desm.) Höhn.

Gloeosporium decolorans Ell. & Ev. *in* J. Mycol. 1:133. 1882.
On *Acer saccharum* Marsh. (sugar maple). 1958. (For. Insect Dis. Surv.:28. 1958).

Gloeosporium malicorticis Cordley *in* Bot. Gaz. 30:57. 1900.
See *Cryptosporiopsis curvispora* (Pk.) Gremmen.

Gloeosporium minus Sheat *in* Bull. Torrey Bot. Club 34:315. 1907.
On fruit of *Vaccinium macrocarpon* Ait. (cranberry). Kings Co. 28 Nov. 1969-C.O.G. (DAOM 147608).

Gloeosporium perennans Zeller & Childs *in* Bull. Ore. Agric. Coll. Exp. Stn. 217:14. 1925.
See *Cryptosporiopsis curvispora* (Pk.) Gremmen.

Gloeosporium phomoides Sacc. *in* Michelia 2:540. 1882.
Phomopsis phomoides (Sacc.) v. Arx.
On fruit of *Capsicum frutescens* L. (red pepper) and *Lycopersicon esculentum* L. (tomato). Kings Co. 7 Nov. 1949-K.A.H.

Gloeosporium ribis (Lib.) Mont. & Desm. *in* Kickx, Flore Crypt. Flandres 2:95. 1867.
See *Gloeosporidiella ribis* (Lib.) Petrak.

Gloeosporium salicis Westend. *in* Herb. Crypt. Belg. No. 1269. 1859.
See *Monostichella salicis* (Westend.) v. Arx.

★**Gloeosporium spadiceum** Dearn. & Bisby *in* The Fungi of Manitoba:133. 1929.
Sporonema spadiceum (Dearn. & Bisby) v. Arx.
On leaves of *Trifolium pratense* L. (red clover). Annapolis Co. 13 June 1973-C.O.G., J.A.P. (DAOM 145549).

Gloeosporium ulmeum Miles *in* Bot. Gaz. 71:161. 1921.
See *Asteroma ulmeum* (Miles) Sutton.

Glomerella cingulata (Stonem.) Spauld. & Schrenk *in* Bull. U.S. Dep. Agric. Bur. Plant Ind. 44:29. 1903.
Stat. conid. *Colletotrichum gloeosporioides* Penz.
General. On many hosts, including *Cydonia oblonga* Mill. (quince), *Fragaria* sp. (cultivated strawberry), *Juglans nigra* L. (black walnut), *Lycopersicon esculentum* Mill. (tomato), *Malus pumila* Mill. (apple), *Prunus serotina* Ehrh. (wild black cherry), *Pyrus communis* L. (pear fruit), *Rhododendron* spp., *Vaccinium angustifolium* Ait. (lowbush blueberry), *V. macrocarpon* Ait. (cranberry) and *Vitis vinifera* L. (grape) and others. 1903-B.D.H., J.A.K.

Glomerularia corni Pk. *in* Annu. Rep. N.Y. State Mus. 32:43. 1879.
On *Cornus canadensis* L. (bunchberry). Colchester Co. 24 July 1936-J.F.H. det. I.L.C. (O-4504) (L.E.W.-502, 1749).

Glonium lineare (Fr.) de Not. *in* G. Bot. Ital. 2:594. 1846.
On *Fagus* sp. (beech). Kings Co. 20 Nov. 1952-K.A.H. (KM-1846 *in* DAOM).

Gnomonia errabunda (Rob.) Auersw. *in* Mycol. Eur. Pyren.:25. 1849.
See *Apiognomonia errabunda* (Rob.) Höhn.

★**Gnomonia fragariae** Kleb. *in* Haupt- und Nebenfruchtformen der Ascomyceten. 1. Gebrüder Borntraeger, Leipzig.:285-288. 1918.
On petiole of *Fragaria* sp. (cultivated strawberry). Kings Co. Aug. 1966-C.O.G. (DAOM 159720) (IMI 213849).

Gnomonia fructicola (Arn.) Fall *in* Can. J. Bot. 29:309. 1951.
Stat. conid *Zythia fragariae* Laibach.
On *Fragaria* sp. (cultivated strawberry). General. 20 June 1952-C.O.G., D.W.C., D.B.O.S.

Gnomonia leptostyla (Fr.) Ces. & de Not. *in* Comm. Soc. Critt. Ital. 1(4):232. 1863.
Stat. conid. *Marssonina juglandis* (Lib.) Magn.
On *Juglans cinerea* L. (butternut). Kings Co. 10 Sept. 1938-J.F.H.

Gnomonia rostellata (Fr.) Wehm. *in* The Genus *Diaporthe* Nitschke and its Segregates, Univ. Mich. Stud. Sci., Ser. 9:266. 1933.
On stems of *Rubus* sp. Colchester Co. 21 July 1929-L.E.W. (W-109).

★**Gnomonia setacea** (Pers. ex Fr.) Ces. & de Not. *in* Comm. Soc. Critt. Ital. 1(4):252. 1863.
On leaves of *Rhododendron* sp. Kings Co. 19 Sept. 1970-C.O.G., K.A.P. (DAOM 148130).

Gnomonia ulmea (Schw.) Thüm *in* Flora:178. 1878.
Stat. conid. *Asteroma ulmeum* (Miles) Sutton.
On leaves of *Ulmus americana* L. (white elm) and *U. pumila* L. (Siberian elm).

Annapolis, Colchester and Kings Co. July 1931-L.E.W. (W-1024).

Gnomoniella coryli (Batsch ex Fr.) Sacc. *in* Syll. Fung. 1:419. 1882.
On *Corylus americana* Walt. (American hazelnut) and *C. cornuta* Marsh. (beaked hazelnut). Kings Co. 7 July 1943-R.M.L. (O-1888).

Godronia cassandrae Pk. *in* Annu. Rep. N.Y. State Mus. 39:50. 1887, f. **vaccinii** Groves *in* Can. J. Bot. 43:1214. 1965.
Gondronia cassandrae Pk. f. sp. *vaccinii* (Groves) Boerema & Verhoeven.
Stat. conid. *Fusicoccum putrefaciens* Shear.
Topospora myrtilli (Feltg.) Boerema.
On wood of *Vaccinium angustifolium* Ait. (lowbush blueberry), *V. corymbosum* L. (highbush blueberry) and on fruit of *V. macrocarpon* Ait. (cranberry). Colchester, Kings and Pictou Co. 27 July 1947-K.A.H., E.L.E., D.W.C., C.O.G. (DAOM 89151, 93054).

Godronia spiraeae (Rehm) Seav. *in* Mycologia 37:342. 1945.
On *Spiraea tomentosa* L. (steeple bush) and *Spiraea* sp. Colchester and Halifax Co. 5 Sept. 1929-L.E.W. (W-276, 1171 det. E.K.C. as *Scleroderris spiraeae* Rehm).

Godronia turbinata (Schw.) Farl. *in* Mycologia 14:101. 1922.
Tympanis turbinata Schw.
On dead stems of *Diervilla lonicera* Mill. (bush honeysuckle). Colchester and Kings Co. 6 July 1931-L.E.W. (W-408, 1525, 1613) (DAOM 87929, 87930).

Godronia urceolus (Alb. & Schw.) Karst. *in* Acta Soc. Fauna Flora Fenn. 2:144. 21885, var. **conferta** Hone *in* Minn. Bot. Stud. 4:111. 1909.
Godronia conferta (Hone) Groves.
On *Prunus* sp. (stone fruit). Colchester Co. 14 July 1931-L.E.W. (W-1020 det. E.K.C.).

Godroniopsis nemopanthis Groves *in* Mycologia 29:71. 1937.
See stat. conid. *Sphaeronema peckii* Sacc. & Syd.

★**Goidanichiella** sp.
From seedlings of *Fragaria* sp. (cultivated strawberry) damping off under mist propagation and from callus growth of *Vaccinium angustifolium* Ait. (lowbush blueberry). Kings Co. 14 June 1972-C.O.G. (DAOM 145402 an undescribed species).

Gomphidius glutinosus (Schaeff. ex Fr.) Fr. var. **glutinosus** *in* Epicr. Syst. Mycol.: 319. 1838.
From Halifax and Kings Co. 1880-J.S. (A.H.M.) (KM-279 *in* DAOM, K.A.H.).

Gomphidius maculatus (Scop. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:319. 1838.
Under *Abies* sp. (fir) and *Picea* sp. (spruce). Colchester, Guysborough, Hants and Kings Co. 2 Sept. 1930-K.A.H. (KM-280,. 982, 4104-4106, 5387 *in* DAOM) (L.E.W.-708).

Gomphidius subroseus Kauff. *in* Mycologia 17:120. 1925.
Gomphidus septentrionalis Sing.
Under *Abies* sp. (fir) and *Picea* sp. (spruce). Colchester and Halifax Co. 1886-J.S. (A.H.M.) (L.E.W.-848, 1769).

Gomphus clavatus (Pers. ex Fr.) S.F. Gray *in* Nat. Arr. Br. Pl. 1:638. 1821.
Cantharellus brevipes Pk.
Cantharellus clavatus Fr.
Craterellus clavatus (Fr.) Fr.
Under *Abies* sp. (fir) and *Picea* sp. (spruce). Colchester, Hants, Kings and Richmond Co. 11 Aug. 1931-A.H.S., L.E.W. (W-732) (KM-180, 526, 4096, 4123, 5303, 5304 as *Nevrophyllum clavatum* (Pers.) Pat., *in* DAOM, K.A.H.).

Gomphus floccosus (Schw.) Sing. *in* Lloydia 8:140. 1945.
Cantharellus floccosus Schw.
On humus under conifers. General. 1908-A.H.M. (KM-181, 929, 961, 2554, 3991, 3992, 5383 *in* DAOM, K.A.H.) (L.E.W.-224, 581).

★ **Gomphus kauffmanii** (A.H. Smith) Corner *in* Ann. Bot. Mem. 2:122. 1966.
Cantharellus kauffmanii A.H. Smith.
From Kings Co. 26 Aug. 1972-K.A.H. (MICH 11849).

Gonatobotrys simplex Cda. *in* Pracht-Flora, tab. 5:9. 1839.
From crowns of *Fragaria* sp. (cultivated strawberry). Kings Co. 14 Dec. 1966-C.O.G.

Gonatobotryum apiculatum (Pk.) Hughes *in* Can. J. Bot. 31:594. 1953.
On *Hamamelis virginiana* L. (witch-hazel). 1975-L.P.M., J.M.M.

Gongronella butleri (Lendn.) Pery. & Dal Vesco *in* Allionia 2:370. 1955.
Absidia butleri Lendn.
Isolated from forest soil. Cumberland Co. 1971-D.B. et al.

Grandinia farinacea (Pers. ex Fr.) Bourd. & Galz. *in* Bull. Soc. Mycol. Fr. 30:253. 1914.
On decayed conifer and hardwoods. Colchester Co. 22 Aug. 1931-L.E.W., K.C. (W-1425 det. K.C., 1644 det. M.A.D.).

★ **Graphiothecium parasiticum** (Desm.) Sacc. *in* Syll. Fung. 4:624. 1886.
From decaying fruit of *Prunus cerasus* L. (sour cherry). Kings Co. 28 July 1969-C.O.G.

Graphis scripta (L.) Ach. var. **scripta** *in* Vetensk. Akad. Nya. Handl.:145. 1809.
Lichen on bark of *Abies balsamea* (L.) Mill., (balsam fir). Victoria Co. 5 Aug. 1931-L.E.W. (W-1245).

Graphis scripta (L.) Ach. var. **topographica** (Willd.) Zahlbr. *in* Cat. Lich. Univ. 2:350-352. 1924.
Lichen on bark of *Betula* spp. (birch) and common on bark of various tree species. Colchester Co. 16 July 1929-L.E.W. (W-42, 405, 1107) det. M.L.L.

Graphium sp.
In culture from crown of *Fragaria* sp. (cultivated strawberry). Kings Co. Jan. 1968-C.O.G.

Gremmeniella abietina (Lagerb.) Morelet *in* Bull. Soc. Sci. Nat. Archeol. Toulon 183:9. 1969.
Lagerbergia abietina (Lagerb.) J. Reid.
Scleroderris lagerbergii Gremmen.
Stat. conid. *Brunchorstia pinea* (Karst.) Höhn.
Causing cankers on branches of *Pinus resinosa* Ait. (red pine). Pictou Co. 1971. (For. Insect Dis. Surv.).

Grifola frondosa (Dicks. ex Fr.) S.F. Gray *in* Nat. Arr. Br. Pl. 1:643. 1821.
Polyporus fondosus Dicks. ex Fr.
On *Quercus rubra* L. (red oak). Kings Co. Sept. 1927-K.A.H. (KM-7, 7a, 4359 in DAOM).

★ **Grifola umbellata** (Pers. ex Fr.) Pilát *in* Beih. Bot. Centralbl. (B) 52:25. 1934.
Polyporus umbellatus Pers. ex Fr.
On soil in woods. Kings Co. 27 July 1980-K.A.H. (ACAD 13559 coll. Pam Hanic).

Guignardia aesculi (Pk.) Stewart in Phytopathology 6:9. 1916.
Stat. conid. *Phyllosticta paviae* Desm.
Leaf blight of *Aesculus hippocastanum* L. (horse chestnut). General. Sept. 1919-J.D.

Guignardia bidwellii (Ell.) Viala & Rav. *in* Bull. Soc. Mycol. Fr. 8:63. 1892.
Stat. conid. *Phyllosticta viticola* (Berk. & Curt.) Thüm.

On fruit of *Vitis* sp. (grape). Annapolis Co. 10 Aug. 1951-J.F.H.

Guignardia populi G.E. Thompson *in* Mycologia 46:658. 1954.
Stat. conid. *Septogloeum rhopaloideum* Dearn. & Bisby.
On leaves of *Populus grandidentata* Michx. (large-toothed aspen) and *P. tremuloides* Michx. (trembling aspen). Kings Co. 17 June 1953-D.W.C., I.L.C.

Guignardia vaccinii Shear *in* Bull. Torrey Bot. Club 34:316. 1907.
See *Botryosphaeria vaccinii* (Shear) Barr.

Gymnoconia peckiana (Howe) Trott. *in* Sydow, Monogr. Ured. 3:84. 1912.
On cultivated and wild *Rubus* spp. General. 4 June 1925-J.F.H.

★**Gymnopilus aeruginosus** (Pk.) Sing. *in* Lilloa 22:560. 1951.
Pholiota aeruginosa Pk.
From Kings Co. Oct. 1977. Recognized as this species by A.H. Smith from color transparency taken by Ken J. Harrison, Maritime Forestry Research Centre, Fredericton, New Brunswick.

Gymnopilus junonius (Fr.) Orton *in* Trans. Br. Mycol. Soc. 43:176. 1960.
Gymopilus spectabilis (Fr.) Sing. (1951).
Pholiota spectabilis (Fr.) Kummer (1871).
On wood of *Abies* sp. (fir), *Acer* sp. (maple), *Betula* sp. (birch), *Malus* sp. (apple) and *Salix* sp. (willow). Colchester, Guysborough, Kings, Lunenburg and Queens Co. 1927-K.A.H. (KM-435-437, 4039, 5295 *in* DAOM) (L.E.W.-738) (O-F6627).

Gymnopilus sapineus (Fr.) Maire *in* Publ. Junta Cienc. Nat. Barcelona, Treb. Mus. Cienc. Nat. Barcelona 15(2):96. 1933.
Flammula sapinea (Fr.) Kummer.
On *Abies balsamea* (L.) Mill. (balsam fir). 1975-L.P.M., J.M.M.

Gymnosporangium clavariiforme (Pers.) DC. *in* Flore Fr. 2:217. 1805.
On *Amelanchier canadensis* (L.) Medic. (shadbush), *A. laevis* Weig. (smooth shadbush), *A. stolonifera* Wieg., *A. wiegandii* Niels., *Crataegus oxyacantha* L. (hawthorn), *Cydonia oblonga* Mill. (quince), *Juniperus communis* L. (common juniper), *J. communis* var. *depressa* Pursh (ground juniper), *Malus pumila* Mill. (apple) and *Pyrus communis* L. (pear). Kings and Lunenburg Co. 20 May 1925-J.F.H. (O-3604, 4509, 5857, DAOM 75330, 75349).

Gymnosporangium clavipes (Cke. & Pk.) Cke. & Pk. *in* Peck., Annu. Rep. N.Y. State Mus. 25:89. 1873.
On *Amelanchier canadensis* (L.) Medic. (shadbush), *A. lucida* Fern., *Aronia melanocarpa* (Michx.) Elliott (black chokeberry), *A. prunifolia* Rehd. (purple chokeberry), *Crataegus oxyacantha* L. (hawthorn), *Cydonia oblonga* Mill. (quince), *Juniperus communis* L. (common juniper), *J. communis* var. *depressa* Pursh, *J. communis* var. *hibernica* Gord., *Malus pumila* Mill (apple). *Pyrus angustifolia* Ait. (southern crabapple), *P. communis* L. (pear) and *Sorbus aucuparia* L. (rowan tree). General. July 1899-John Macoun. (DAOM 3785, 5923, 14509, 105626, 165027 from Sable Island).

Gymnosporangium connersii Parmelee *in* Can. J. Bot. 43:245. 1965.
On *Crataegus* sp. (hawthorn) and *Juniperus horizontalis* Moench (creeping savin). Antigonish Co. 23 May 1964-J.A.P. (DAOM 105638, 137845).

Gymnosporangium corniculans Kern *in* Mycologia 2:236. 1910.
On *Juniperus horizontalis* Moench (creeping savin). 1965-J.A.P.

Gymnosporangium cornutum Arth. ex Kern *in* Bull. N.Y. Bot. Gard. 7:444-445. 1911.
On *Juniperus communis* L. var. *depressa* Pursh (common juniper) and *Sorbus americana* Marsh. (mountain ash). Annapolis Co. 10 Sept. 1952-J.F.H. (DAOM 35056, 44005).

Gyromitra esculenta (Pers.) Fr. *in* Summa Veg. Scand.:346. 1849.
On soil. General. 1908-A.H.M. (10 June 1925-L.E.W. leg. A.R.P., W-236, 1098) (KM-1151, 5167, 5168 *in* DAOM, K.A.H.).

Gyromitra infula (Schaeff. ex Fr.) Quél. *in* Ench. Fung.:272. 1886.
Helvella infula Schaeff. ex Fr.
On duff under conifers. Cape Breton, Colchester and Kings Co. 27 Aug. 1931-L.E.W. (W-1416 leg. A.H.S.) (KM-1144, 1146, 4183, 5166 *in* DAOM, K.A.H.) (DAOM 112639, K.A.H.).

Gyroporus castaneus (Bull. ex Fr.) Quél. *in* Ench. Fung.:161. 1886.
Boletus castaneus Fr.
In mixed and hardwood forests. Colchester, Kings and Queens Co. 29 July 1931-A.H.S., L.E.W. (W-671) (KM-552, 992, 994, 2985, 5336 *in* DAOM, K.A.H.) (ACAD 10444, D.W.G., K.A.H.).

Gyroporus cyanescens (Bull. ex Fr.) Quél. *in* Ench. Fung.:161. 1886 var. **violaceotinctus** Watling *in* Notes R. Bot. Gard. Edinb. 29(1):63. 1969.
In mixed woods on bare ground. Colchester, Hants and Kings Co. 11 Aug. 1931-A.H.S., L.E.W. (W-734, 734a, as *Boletus cyanescens* Fr.) (KM-555, 3764, 3765 *in* DAOM, K.A.H.) (ACAD 555, 7992, 8003, 10425, D.W.G., K.A.H.).

★ **Haematostereum rugosum** (Pers. ex Fr.) Pouz. *in* Česká Mykol. 13(1):12. 1959.
Stereum rugosum (Pers. ex Fr.) Fr.
On *Acer rubrum* L. (red maple), *Aesculus hippocastanum* L. (horse chestnut), *Alnus* sp. (alder), *Betula papyrifera* Marsh. (white birch), *B. populifolia* Marsh. (wire birch), *Fagus grandifolia* Ehrh. (beech), *Malus* sp. (apple), *Populus* sp. (poplar) and *Prunus pensylvanica* L.f. (pin cherry). Kings Co. 18 June 1942-R.M.L. (KM-2129 *in* DAOM, R.M.L.).

Haematostereum sanguinolentum (Alb. & Schw. ex Fr.) Pouz. *in* Česká Mykol. 13(1):12. 1959.
Stereum sanguinolentum (Alb. & Schw. ex Fr.) Fr.
On *Abies balsamea* (L.) Mill. (balsam fir), *Fagus grandifolia* Ehrh. (beech), *Larix laricina* (DuRoi) K. Koch (tamarack), *Pinus glauca* (Moench) Voss (white spruce), *P. rubens* Sarg. (red spruce), *Pinus banksiana* Lamb. (jack pine) and *Tsuga canadensis* (L.) Carr. (hemlock). General. 1930-J.F.H. (L.E.W.-1045, 1300, 1331) (KM-2781, 2782, 2784, 3088, 3090 *in* DAOM, K.A.H.).

Haligena spartinae Jones *in* Trans. Br. Mycol. Soc. 45:245. 1962.
On salt marsh material. Kings Co. 1979-G.J.B.

Halosphaeria appendiculata Linder *in* Barghoorn & Linder, Farlowia 1:412. 1944.
On driftwood. Digby, Lunenburg, Queens and Shelburne Co. 1970-G.A.N.

Halosphaeria hamata (Höhnk) Kohlm. *in* Can. J. Bot. 50:1956. 1972.
Ceriosporopsis hamata Höhnk.
Remispora hamata (Höhnk) Kohlm.
On intertidal wood. Shelburne Co. 1970-G.A.N.

Halosphaeria mediosetigera Cribb & Cribb *in* Pap. Univ. Queensl. Dep. Bot. 3:100. 1956.
On *Spartina alterniflora* Loisel. (cord-grass) and on wood. Kings Co. 9 Aug. 1975-G.J.B., D.W.G.

★ **Hamigera striata** (Raper & Fennell) Stolk & Samson *in* Persoonia 6(3):347-349. 1971.
Stat. conid. *Penicillium striatum* Raper & Fennell.
From crown of *Fragaria* sp. (cultivated strawberry), callus tissue of *Vaccinium angustifolium* Ait. (lowbush blueberry) and decaying fruit of *V. macrocarpon* Ait. (cranberry). Kings Co. June 1968-C.O.G., D.M. (DAOM 145847).

Hansfordia pulvinata (Berk. & Curt.) Hughes *in* Can. J. Bot. 36:771. 1958.
Hansfordia grisella (Sacc.) Hughes.
With *Cladosporium fulvum* Cke. on leaves of *Lycopersicon esculentum* Mill. (tomato). Kings Co. 15 Nov. 1963-C.O.G.

Hapalopilus nidulans (Fr.) Karst. *in* Rev. Mycol. 3(9):18. 1881.
Polyporus nidulans Fr.
On *Abies balsamea* (L.) Mill. (balsam fir), *Acer rubrum* L. (red maple), *Betula lutea* Michx. f. (yellow birch), *Fagus grandifolia* Ehrh. (beech). Colchester Co. 25 July 1931-L.E.W. (W-1134, 1184).

Haploporus suaveolens (L. per Fr.) Donk *in* Proc. K. Ned. Akad. Wet., Ser. C, Biol. Med. Sci. 74(1):20. 1971.
Daedalea suaveolens Fr.
Polyporus suaveolens Fr.
Trametes suaveolens (L. ex Fr.) Fr.
On *Salix* sp. (willow). Kings Co. 9 Sept. 1930-K.A.H. (KM-67, 3105, 4318 *in* DAOM) (O-F2994).

Haptoglossa heterospora Drechsler *in* J. Wash. Acad. Sci. 30:246. 1940.
In association with nematodes from hay. Kings Co. 1980-M.E.A.

Haptoglossa zoospora Davidson & Barron *in* Can. J. Bot. 51:1322. 1973.
In association with nematodes from compost and dung (cow). Kings Co. 1980-M.E.A.

Harknessia sp.
On *Fragaria* sp. (cultivated strawberry) and *Rhododendron* sp. Kings Co. 1962-C.O.G., S.J.H. (DAOM 88678).

Harposporium arcuatum Barron *in* Can. J. Bot. 58:447. 1980.
In association with nematodes from compost, dung (chicken, cow, horse, sheep), old stump and straw. Kings Co. 1980-M.E.A.

Harposporium bysmatosporum Drechsler *in* Bull. Torrey Bot. Club 273:563. 1946.
In association with nematodes from compost and barnyard soil. Kings Co. 1980-M.E.A.

Harposporium cocleatum Drechsler *in* Mycopathologia 27:285-288. 1965.
Isolated from dung (horse). Kings Co. 1979-G.L.B. coll. M.E.A.

Harposporium crassum Shepherd *in* Trans. Br. Mycol. Soc. 38:47. 1955.
In association with nematodes from compost, dung (chicken, cow, horse), soil (apple orchard, greenhouse), stump and wood chips. Kings Co. 1980-M.E.A.

Harposporium crassum Shepherd (a variety).
In association with nematodes from compost and dung (cow, horse). Kings Co. 1980-M.E.A. (MSc Thesis, Acadia Univ., plate viii, var. prov. *longisporum*).

Harposporium cyclindrosporum Barron *in* Can. J. Bot. 58:2195. 1980.
From soil, wood of *Acer* sp. (maple). Kings Co. 15 Oct. 1979-G.L.B. (OAC 10798 coll. M.E.A.).

Harposporium cycloides Drechsler *in* Am. J. Bot. 55(10):1251. 1968.
In association with nematodes from compost, dung (cow, hog, horse, sheep) and straw. Kings Co. 1980-M.E.A.

Harposporium lilliputanum Dixon *in* Trans. Br. Mycol. Soc. 35:144-148. 1952.
In association with nematodes from soil in deciduous woods and old stumps in coniferous woods. Kings Co. 1980-M.E.A.

Harposporium sp.
In association with nematodes from compost, dung (chicken) and hay. Kings Co. 1980-M.E.A. (MSc Thesis, Acadia Univ., plate xx, *H. lunasporum* nom prov.).

Hebeloma crustuliniforme (Bull. ex St. Amans) Quél. *in* Champ. Jura et Vosges: 128. 1872.

On humus under *Acer* sp. (maple) and *Fagus* sp. (beech). Colchester and Lunenburg Co. 1913-A.H.M. (L.E.W.-853).

Hebeloma fastibile (Pers. ex Fr.) Kummer *in* Führ. in Pilzkd.:83. 1882.

From Halifax Co. 1908-A.H.M.

Hebeloma glutinosum (Lindgr.) Sacc. *in* Syll. Fung. 5:793. 1887.

Reported from Lunenburg Co. 1913-A.H.M. (Hesler's grouping excludes this species as too poorly known. Probably *Pholiota lenta,* fide A.H. Smith).

Hebeloma mesophaeum (Pers. ex Fr.) Quél. *in* Champ. Jura et Vosges:128. 1872.

On lawn beneath shrubs. Kings Co. 1950-L.E.W. (KM-284 *in* DAOM, K.A.H., fide A.H.S.).

Helicobasidium holospirum Bourd. *in* C.R. Assoc. Fr. Sci. 45^{e} Sess., Rouen (1921): 575. 1922.

On *Dryopteris spinulosa* (O.F. Müll.) Watt. var. *intermedia* (Muhl.) Underw. (wood fern). 1975-L.P.M., J.M.M.

Helminthosphaeria clavariarum (Tul.) Fckl. *in* Symb. Mycol.:166. 1870.

Stat. conid. *Scolecotrichum clavariarum* (Desm.) Sacc.

As a parasite on *Clavaria cristata* (Holmsk. ex Fr.) Pers. and *Clavaria rugosa* Bull. Colchester and Queens Co. 27 July 1931-L.E.W. (W-1164, 1669, 1374 leg. A.H.S.) (KM-1231, 1232, 1463, 5375 *in* DAOM, K.A.H.).

Helminthosporium solani Dur. & Mont. *in* Flore d'Algérie Crypt.:356. 1849.

Helminthosporium atrovirens (Harz.) Mason & Hughes.

Spondyloclandium atrovirens (Harz.) Harz. ex Sacc.

Silver scurf disease of *Solanum tuberosum* L. (potato). 1934. (Can. Plant Dis. Surv. 14:43. 1934).

Helotium epiphyllum (Pers. ex Fr.) Fr. *in* Summa Veg. Scand.:356. 1849.

On leaves of *Acer* sp. (maple) and *Fagus* sp. (beech). Colchester Co. 17 Aug. 1931-L.E.W. (W-1330, 1330a, leg. A.H.S.).

Helotium fructigenum (Bull. ex Mérat) Fckl. *in* Jahrb. Nass. Vereins Naturkd. 23-24:314. 1870.

On acorns of *Quercus borealis* Michx f. (red oak). Kings Co. 2 Sept. 1946-K.A.H. (KM-1650 *in* DAOM).

Helvella acetabulum (Fr.) Quél. *in* Ench. Fung.:275. 1886.

Acetabula sulcata (Pers.) Fckl.

Helvella sulcata (Afz.) Fr.

Paxina sulcata (Pers.) Kuntze.

On soil under conifers. Colchester Co. July 1933-L.E.W. (W-1581).

Helvella crispa (Scop.) Fr. *in* Syst. Mycol. 2:14. 1822.

On old stump. Colchester and Queens Co. 22 Aug. 1931-L.E.W. (W-1387) (KM-5164 *in* DAOM, K.A.H.).

Helvella elastica Bull. *in* Herb. Fr., pl. 242. 1785.

On soil in mixed woods. Colchester Co. 21 Aug. 1931-L.E.W. (W-1378).

Helvella lacunosa Afz. ex Fr. *in* Syst. Mycol. 2:15. 1822.

Helvella mitra L.

In mixed woods. Colchester Co. 4 July 1931-L.E.W. (W-381, 381a).

Helvella macropus (Pers. ex Fr.) Karst. *in* Not. Sällsk. Fauna Flora Fenn. Förh. 11:224. 1870.

Macropodia macropus (Pers.) Fckl.

Macropodia subclavipes (Phill. & Ell.) Rehm.

Peziza macropus Pers. ex Fr.

Peziza subclavipes Phill. & Ell.
On moist soil and decaying logs. Colchester, Inverness, Kings and Pictou Co. 17 July 1931-L.E.W. (W-240 as *M. subclavipes,* 1075a,b, leg. A.H.S.) (KM-1105, 1106, 1172, 1514, 5165 *in* DAOM, K.A.H.).

* **Helvella pezizoides** Afz. *in* Vetensk. Akad. Handl., tab. 10, fig. 2:308. 1783.
On lawn under *Ulmus* sp. (elm). Queens Co. July 1981-K.A.H. (ACAD 13791).

Helvella pulla Holmsk. *in* Fungi. Dan. 2:49, tab. 26. 1799.
From Kings Co. 4 Sept. 1932-K.A.H. (KM-1148 *in* DAOM, and states close to *H. elastica* and probably that species).

* **Helvella queletii** Bres. *in* Rev. Mycol. 4:211. 1882.
In mixed woods. Kings Co. July 1968-K.A.H. (MICH 7623, 7648 det. Nancy (Smith) Weber).

* **Helvella sulcata** Afz. *in* Vetensk. Akad. Handl.:305. 1783.
Under conifers. Kings Co. 8 July 1980-K.A.H. (ACAD 13509).

Hemitrichia stipitata (Massee.) Macbr. *in* North Am. Slime-Moulds:207. 1899.
On decayed wood of *Fagus* sp. (beech) and *Populus* sp. (poplar). Colchester and Pictou Co. 1906-C.L.M. (L.E.W.-156 as *H. clavata* (Pers.) Rost., 1078).

* **Hendersonia mali** Thüm. *in* Contrib. Flore Litor., 138, tab. 1., fig. 27:1878-1881.
On leaves of *Malus pumila* Mill. (apple). Kings Co. 17 July 1951 C.L.L.

Hendersonia pinicola Wehm. *in* Mycologia 38:312. 1945.
On *Pinus banksiana* Lamb. (jack pine). Cumberland Co. 1975. (For. Insect Dis. Surv.:28. 1975).

Hendersonia sarmentorum Westend. *in* Bull. Brux. 18, No. 60. 1851.
On *Acer pensylvanicum* L. (striped maple) and *Malus pumila* Mill. (apple). Kings Co. June 1926-L.E.W. (W-104).

Hendersonia sp.
On *Abies balsamea* (L.) Mill. (balsam fir). 1975-L.P.M., J.M.M.

* **Henningsomyces candidus** (Pers.) Kuntze *in* Rev. Gen. Pl. 3(2):483. 1898.
Solenia candida Hoffm. ex Fr.
Solenia polyporoidea Pk.
On *Abies* sp. (fir) and *Picea* sp. (spruce). Kings Co. 7 Nov. 1952-K.A.H. (KM-1838 det. W.B.C. as *S. candida,* 1873 *in* DAOM) (ACAD 1838).

Hericium coralloides (Scop. ex Fr.) S.F. Gray *in* Nat. Arr. Br. Pl. 1:652. 1821.
Hydnum coralloides Fr.
On *Betula* sp. (birch) and *Fagus grandifolia* Ehrh. (beech). Annapolis, Cumberland and Kings Co. 29 Aug. 1931-L.E.W. (W-1427 coll. A.H.S.) (KM-3436 *in* DAOM, K.A.H.).

Hericium ramosum (Bull. ex Mérat) Letellier *in* Hist. Descr. Champ:43. 1826.
Hericium caput-ursi (Fr.) Banker.
Hericium laciniatum (Leers) Banker.
On *Betula lutea* Michx. f. (yellow birch) and *Fagus grandifolia* Ehrh. (beech). Colchester and Kings Co. 15 Aug. 1931-L.E.W. (W-1310, 1310a, coll. A.H.S.) (KM-4385 *in* DAOM, K.A.H.).

Herpobasidium deformans Gould *in* Iowa State Coll. J. Sci. 19:317. 1945.
Stat. conid. *Glomerularia lonicerae* (Pk.) Dearn. & House.
On *Lonicera canadensis* Bartr. (fly-honeysuckle) and *L. tatarica* L. (honeysuckle). Digby and Kings Co. 17 Aug. 1948. J.F.H., D.W.C. (A.E.R.-35).

Herpobasidium filicinum (Rostr.) Lind *in* Ark. Bot. 7(8):7. 1908.
Gloeosporium filicinum Rostr.
On *Dryopteris disjuncta* (Ledeb.) Morton (oak fern). Kings Co. 1950-L.E.W. (A.E.R.-359, fide H.S.J.).

Herpotrichia nigra Hartig *in* Allg. Forst- Jagdztg, Frankfort, N.F., 64:15. 1888; also Hedwigia 27:13. 1888.
Herpotrichia juniperi (Duby) Petrak.
On *Picea glauca* (Moench) Voss (white spruce). 1975-L.P.M., J.M.M.

Herpotrichia pezizula (Berk. & Curt.) Ell. & Ev. *in* North Am. Pyren.:160. 1892.
Stat. conid. *Helicoma curtisii* Berk.
On *Acer spicatum* Lamb. (mountain maple). Colchester Co. 12 Aug. 1931-L.E.W. (W-1288).

Heterobasidion annosum (Fr.) Bref. *in* Unters. Gesamtgeb. Mykol. 8:154. 1888.
Fomes annosus (Fr.) Cke.
Fomitopsis annosa (Fr.) Bond & Sing.
Polyporus annosus Fr.
On stumps and trunks of trees. Colchester Co. 1880-J.S. (A.H.M.) as *F. annosus.*

Heterochaetella dubia (Bourd. & Galz.) Bourd. & Galz. *in* Hymén. Fr.:51. 1928 (Figs. 23-36).
On *Fomes fomentarius* (L. ex Fr.) Kickx. 1975-L.P.M., J.M.M.

Heterosporium phlei Gregory *in* Phytopathology 9:576-580. 1919.
On leaves of *Phleum pratense* L. (timothy). Colchester Co. 15 July 1955-J.E.M., D.W.C.

* **Heyderia abietis** (Fr.) Link *in* Maas Geesteranus, Persoonia 3:87. 1964.
Mitrula abietis Fr.
On needles of *Abies* sp. (fir) and *Picea* sp. (spruce). Annapolis and Kings Co. 7 Oct. 1979-K.A.H. (ACAD 13446).

Hirschioporus abietinus (Dicks. ex Fr.) Donk *in* Meded. Bot. Mus. Herb. Univ. Utrecht, No. 9:162. 1933.
Polyporus abietinus (Dicks.) Fr.
On *Abies balsamea* (L.) Mill. (balsam fir), *Picea rubens* Sarg. (red spruce), *Pinus* sp. (pine) and *Tsuga canadensis* (L.) Carr. (hemlock). Colchester and Kings Co. 8 Aug. 1929-L.E.W. (W-222) (KM-44, 44a, 45 in DAOM, K.A.H.). (O-F2899, 2923, 7206).

Hirschioporus pargamenus (Klotzsch) Bond. & Sing. *in* Ann. Mykol. 39:63. 1941.
Polyporus pargamenus Fr.
On *Acer pensylvanicum* L. (striped maple), *A. rubrum* L. (red maple), *Betula lutea* Michx. f. (yellow birch), *B. papyrifera* Marsh. (white birch), *B. populifolia* Marsh. (wire birch), *Fagus grandifolia* Ehrh. (beech), *Populus tremuloides* Michx. (trembling aspen) and *Prunus* sp. (stone fruit). Colchester and Pictou Co. 1908-A.H.M. (L.E.W.-1503).

* **Hohenbuehelia geogenius** (DC. ex Fr.) Sing. *in* Lilloa 22:255. 1951.
Pleurotus geogenius (DC. ex Fr.) Gill.
On soil near new construction site. Kings Co. 21 July 1961-K.A.H. (KM-5513).

Hohenbuehelia grisea (Pk.) Sing. *in* Lilloa 22:255. 1951.
Pleurotus griseus Pk.
On deciduous wood. Colchester Co. 29 June 1931-A.H.S., L.E.W. (as *Pleurotus atrocaeruleus* (Fr.) Gill. var. *griseus* Pk.) (W-521, 1646).

Hohenbuehelia petaloides (Bull. ex Fr.) Schulz. apud Schulz., Kanitz & Knapp. *in* Lilloa 22:255. 1951.
Pleurotus petaloides (Fr.) Quél.
From Lunenburg Co. 1913-A.H.M.

Hohenbuehelia serotina (Schrad. ex Fr.) Sing. *in* Lilloa 22:254. 1951.
See *Panellus serotinus* (Schrad. ex Fr.) Kühner.

* **Holwaya gigantea** (Pk.) Durand *in* Bull. Torrey Bot. Club 28:354. 1901.
Patellaria leptosperma Pk.
On *Ulmus* sp. Kings Co. 9 Nov. 1953-K.A.H. (KM-5112 *in* DAOM).

***Hormodendrum hordei** Bruhne *in* Zopf. Beitr. 4:1. 1894.
From stamens of *Fragaria* sp. (cultivated strawberry), tuber of *Solanum tuberosum* L. (potato) and milled peat, *Sphagnum* sp. Kings Co. 1961-C.O.G.

Humaria aggregata (Berk. & Br.) Sacc. *in* Syll. Fung. 8:134. 1889.
Humarina aggregata (Berk. & Br.) Seav.
On newly burned ashes. Kings Co. 21 May 1934-K.A.H. (KM-1104 *in* DAOM).

Humicola alopallonella Meyers & Moore *in* Am. J. Bot. 47:346. 1960.
On wood. Kings Co. 9 Nov. 1975-G.J.B., D.W.G.

Humicola grisea Traaen *in* Nytt. Mag. Naturvidensk. 52:34. 1914.
Isolated from soil. Cumberland Co. 1971-D.B. et al.

Hyalopsora aspidiotus (Magn.) Magn. *in* Ber. Dtsch. Bot. Ges. 19:582. 1901.
On *Abies balsamea* (L.) Mill. (balsam fir). 1930-J.H.F.

Hydnellum aurantiacum (Batsch ex Fr.) Karst. *in* Medd. Soc. Fauna Flora Fenn. 5:41. 1870.
Under conifers. Annapolis Valley, Cape Breton Island, Colchester and Guysborough Co. 31 Aug. 1927-L.E.W. (W-67, 1040, 1040a) (A.R.P.-6230) as *Hydnellum floriforme* (Schaeff.) Banker (KM-2914-2916, 3253-3260, 4388-4391, 4430-4434, 4923-4926, 4932-4936 *in* DAOM, K.A.H.).

Hydnellum caeruleum (Hornem. ex Pers.) Karst. *in* Medd. Soc. Fauna Flora Fenn. 5:42. 1879.
Hydnellum cyaneotinctum (Pk.) Banker.
Under conifers, often *Pinus resinosa* Ait. (red pine). General. 28 July 1931-L.E.W. (1172, 1172a,b, 1292 as *H. cyaneotinctum*) (KM-2336, 2343, 2917, 3262, 3264-3269, 4392-4405, 4779-4782 *in* DAOM, K.A.H.).

Hydnellum chrysinum Harrison *in* Can. J. Bot. 42:1223. 1964.
Under *Pinus resinosa* Ait. (red pine). Annapolis Valley. 1964-K.A.H. (KM-2351-2353, 3261, 3652, 4406-4408 *in* DAOM) (MICH (KM-4407) type).

Hydnellum cruentum Harrison *in* Can. Dep. Agric. Publ. 1099:37. 1961.
Under *Picea* sp. (spruce). Annapolis, Cape Breton Island, Guysborough, Hants and Kings Co. 14 Aug. 1959-K.A.H. (KM-3288, 3289, 3292, 3294, 4409-4417, 4723, 4783, 4785-4788, 4940-4946 *in* DAOM) (DAOM 53376 type).

Hydnellum cumulatum Harrison *in* Can. J. Bot. 42:1225. 1964.
In duff under mixed strands of *Pinus resinosa* Ait. (red pine) and *Tsuga canadensis* (L.) Carr. (hemlock). Annapolis and Kings Co. 18 Oct. 1951-K.A.H. (KM-1974, 4724-4728, 4950 *in* DAOM) (DAOM 94215 et MICH).

Hydnellum cyanodon Harrison *in* Can. J. Bot. 42:1222. 1964.
In deep moss under *Picea* sp. (spruce). Antigonish, Cape Breton, Guysborough, Richmond and Victoria Co. 11 Sept. 1962-S. Cur. (KM-4871-4876 *in* DAOM, K.A.H.).

Hydnellum diabolus Banker *in* Mycologia 5:194. 1913.
Under conifers. General. 15 July 1931-L.E.W. (W-1039, 1173, 1173a,b) (KM-2940-2944, 3295-3317, 4418-4429, 4789-4798, 4947-4949 *in* DAOM, K.A.H.).

Hydnellum frondosum Harrison *in* Can. Dep. Agric. Publ. 1099:44. 1961.
In mixed woods near *Pinus* sp. (pine) and *Tsuga* sp. (hemlock). Annapolis, Cape Breton and Kings Co. 21 Sept. 1952-K.A.H. (KM-1970, 2362, 3677, 3678, 4435-4443, 4800, 4801, 4802 *in* DAOM) (DAOM 53374 type).

Hydnellum goegenium (Fr.) Banker *in* Mycologia 5:204. 1913.
Under *Abies* sp. (fir) and *Picea* sp. (spruce). General. 28 Aug. 1931-L.E.W. (W-1419) (KM-668-670, 3337, 3338, 4444-4448, 4803-4806 *in* DAOM, K.A.H.).

Hydnellum mirabile (Fr.) Karst. *in* Medd. Soc. Fauna Flora Fenn. 5:41. 1879.
Calodon mirabilis (Fr.) Karst.
Hydnum mirabile Fr.

On needle duff under conifers. Annapolis, Antigonish, Colchester, Guysborough and Kings Co. 23 July 1931-L.E.W. (W-1118) (KM-1964, 3218-3223, 3565, 3566, 4449, 4450, 4807-4812, 4952, 4953 *in* DAOM, K.A.H.).

Hydnellum multiceps Harrison *in* Can. Dep. Agric. Publ. 1099:45. 1961.

In woods of *Abies* sp. (fir) and *Picea* sp. (spruce). Kings Co. 14 Oct. 1953-K.A.H. (KM-2359, 3351-3358, 4451, 4813, 4814, 4954, 4955 *in* DAOM) (DAOM 53379 type).

Hydnellum nigellum Harrison *in* Can. J. Bot. 42:1230. 1964.

Under *Picea* sp. (spruce). Kings Co. 26 Sept. 1959-K.A.H. (KM-4721, 4877 *in* DAOM) (DAOM 94216 type).

Hydnellum peckii Banker *in* Mycologia 5:203. 1913.

In damp locations under *Picea* sp. (spruce). Annapolis and Kings Co. 12 Sept. 1953-K.A.H. (KM-2344, 2946-2948, 3318, 3626-3632, 4452-4459 *in* DAOM).

Hydnellum pineticola Harrison *in* Can. J. Bot. 42:1226. 1964.

Hydnellum velutinum (Fr.) Karst. var. *spongiosipes* (Pk.) Maas G.

Usually under *Pinus* sp. (pine) on sandy plains. Annapolis, Cape Breton, Colchester, Guysborough, Hants, Kings and Victoria Co. 28 Aug. 1953-K.A.H. (KM-1956, 2331, 2332, 2861, 3405-3422, 4501-4513, 4956-4959, 4961 *in* DAOM) (Type SM 63973 MICH et DAOM 94227).

Hydnellum scleropodium Harrison *in* Can. J. Bot. 42:1219. 1964.

In coniferous woods. Kings Co. Oct. 1962-K.A.H. (Type SM 10718 MICH et DAOM).

Hydnellum scrobiculatum (Fr.) Karst. *in* Medd. Soc. Fauna Flora Fenn. 5:41. 1879, var. **scrobiculatum.**

In coniferous and mixed woods. General. 8 Sept. 1959-K.A.H. (KM-3359-3387, 4460-4489, 4815-4824, 4962-4967 *in* DAOM).

Hydnellum scrobiculatum (Fr.) Karst. var. **zonatum** (Batsch ex Fr.) Harrison *in* Can. Dep. Agric. Publ. 1099:43. 1961.

Hydnellum velutinum var. *zonatum* (Fr.) Maas G.

Hydnellum zonatum Batsch.

Hydnum zonatum Batsch ex Fr.

In woods of *Pinus* sp. (pine) and under other conifers and hardwoods. Annapolis, Colchester, Halifax, Kings, Queens, Richmond and Victoria Co. 30 July 1931-L.E.W. (W-65, 1181) (KM-2859, 2860, 3049, 3423-3429, 3707, 4514-4516, 4825-4827, 4968, 4970 *in* DAOM, K.A.H.).

Hydnellum suaveolens (Scop. ex Fr.) Karst. *in* Medd. Soc. Fauna Flora Fenn. 5:41. 1879.

Under mixed woods of *Abies* sp. (fir) and *Picea* sp. (spruce). Annapolis, Colchester, Hants, Kings and Richmond Co. 14 July 1931-L.E.W. (W-1035a,b,c, coll. A.H.S.) (KM-2854-2858, 3263, 3388, 3394, 4490-4497, 4828-4831, 4979, 4980 *in* DAOM, K.A.H.).

Hydnellum subzonatum Harrison *in* Can. Dep. Agric. Publ. 1099:37. 1961.

Under *Picea* sp. (spruce). Cape Breton Island and Kings Co. 11 Sept. 1959-K.A.H. (KM-2883, 3270, 3395-3398, 4498-4500, 4832-4836, 4974-4978 *in* DAOM) (DAOM 53377 type).

Hydnochaete olivaceum (Schw.) Banker *in* Mycologia 6:234. 1914.

On *Acer rubrum* L. (red maple), *Fagus grandifolia* Ehrh. (beech), *Quercus rubra* L. (red oak), *Quercus* sp. and coniferous twigs. Kings and Shelburne Co. 10 Aug. 1928-L.E.W. (W-1496) (KM-70 *in* DAOM, K.A.H.).

★**Hydnotrya cubispora** (Bessey & Thompson) Gilkey *in* Ore. State Monogr. Bot. 1:23. 1939.

Genea cubispora Bessey & Thompson.

Under *Picea* sp. (spruce). Queens and Kings Co. 11 Oct. 1952-K.A.H. (KM-1689, 1690, 2208, 5163 *in* DAOM) (Found in droppings of wood mice, Kristina Ovaska, Acadia Univ., 1980).

Hydnum amarescens Quél. *in* Bull. Soc. Amis Sci. Nat. Rouen 15:172. (1879)1880.
Sarcodon radicatus Banker.
On soil underneath overturned stump. Colchester Co. 7 Aug. 1933-L.E.W. (W-1615).

Hydnum imbricatum Fr. *in* Syst. Mycol. 1:398. 1821.
Sarcodon imbricatus (L. ex Fr.) Karst.
Under *Abies* sp. (fir) and *Picea* sp. (spruce). Hants, Kings, Lunenburg and Pictou Co. 1913-A.H.M. (KM-673, 674, 2903, 2904, 4524-4527, 4838, 4839 *in* DAOM, K.A.H.).

Hydnum lanuginosum Harrison *in* Can. Dep. Agric. Publ. 1099:30. 1961.
Common under *Abies* sp. (fir) and *Picea* sp. (spruce). General. 1951-K.A.H. (KM-2292, 2910-2912, 3240, 3560, 4528-4533, 4840-4843, 4916, 4917, 4928 *in* DAOM) (DAOM 53375 type) (KM-1488 *in* ACAD).

Hydnum martioflavum Snell, Harrison & Jackson *in* Lloydia 25:161. 1962.
Under *Abies balsamea* (L.) Mill. (balsam fir) and *Picea* sp. (spruce). Kings Co. 15 Aug. 1959-K.A.H. (KM-3205-3211, 3555-3557, 4534, 4535, 4844 *in* DAOM) (W.H.S. 3011 type in Brown Univ. Providence, R.I.).

Hydnum scabrosum Fr. *in* Anteckn. Ofv. Sver. Väx. Atl. Svamp. 62. 1836.
Sarcodon scabrosus (Fr.) Karst.
In conifers and mixed woods. General. 1913-A.H.M. (KM-2905-2907, 3513, 4538-4543, 4863-4865, 4867, 4918, 4919 *in* DAOM, K.A.H.) (KM-4866 *in* ACAD, K.A.H.). (KM-2908, 2909, 3193-3204 as *Hydnum fennicum* (Karst.) Sacc. *in* DAOM, K.A.H.).

Hydnum stereosarcinon (Wehm.) Harrison *in* Can. Dep. Agric. Publ. 1099:30. 1961.
Hydnum brevipes (Coker) Snell.
Sarcodon brevipes Coker.
Sarcodon stereosarcinon Whem.
Under *Abies* sp. (fir) and *Picea* sp. (spruce). Annapolis, Colchester, Guysborough, Hants and Kings Co. Cape Breton Island. 23 Aug. 1929-L.E.W. (W-262, 380, 380a) (KM-2895-2901, 3173-3192, 4544-4561, 4855-4857, 4859-4862, and others *in* DAOM, K.A.H.) (KM-4854, 4858 *in* ACAD, K.A.H.).

Hydnum subfelleum Harrison *in* Can. Dep. Agric. Publ. 1099:28. 1961.
Under *Abies* sp. (fir) and *Picea* sp. (spruce). Annapolis, Cape Breton, Digby, Guysborough and Kings Co. 21 July 1954-K.A.H. (KM-2902, 3224-3239, 4562-4566, 4846-4852, 4922, 4929, 4930 *in* DAOM) (DAOM 53380 type).

Hydnum underwoodii (Banker) Sacc. & Trott. *in* Syll. Fung. 21:364. 1912.
Sarcodon underwoodii Banker.
On ground. 1975-L.P.M., J.M.M. (Kings Co. ACAD 13688, 13872, July 1981, K.A.H.).

Hydnum versipelle Fr. *in* Monogr. Hymen. 2:274. 1863.
Hydnum crassum Harrison.
Under *Picea* sp. (spruce) and *Tsuga* sp. (hemlock). Annapolis and Kings Co. 28 July 1957-K.A.H. (DAOM 53378 type) (KM-3546-3550, 4517-4523, 4837 *in* DAOM).

Hygrophoropsis aurantiaca (Wulfen ex Fr.) Maire apud Martin-Sans *in* L'Empoisonnement:99. 1929.
Cantharellus aurantiacus Wulfen ex Fr.
Clitocybe aurantiaca (Wulfen ex Fr.) Studer.
From Halifax Co. 9 Sept. 1958-K.A.H. (KM-3979 *in* DAOM as *Clitocybe aurantiaca*).

★ **Hygrophoropsis morgani** (Pk.) Bigelow *in* Beih. Nova Hedwigia 51:66. 1975.
Cantharellus morgani Pk.
Clitocybe morgani (Pk.) Bigelow (1962).
Under *Abies balsamea* (L.) Mill. (balsam fir) and *Picea* sp. (spruce). Antigonish and Kings Co. 28 Sept. 1953-K.A.H. (KM-2466, 3984, 3985, 4630, 4631, 4641-4643, 5283 det. K.A.H., H.E.B. *in* DAOM).

Hygrophorus agathosmus (Fr.) Fr. *in* Epicr. Syst. Mycol.:325. 1838.
Under conifers. Kings Co. 29 Oct. 1968-K.A.H., C.J.B. (ACAD 12280, 12283, 12287, 12288).

Hygrophorus borealis Pk. f. **borealis** *in* Annu. Rep. N.Y. State Mus. 26:64. 1874.
Camarophyllus borealis (Pk.) Murr.
Under mixed woods. Colchester, Kings and Yarmouth Co. 7 Sept. 1931-A.H.S., L.E.W. (W-882) (KM-891 *in* DAOM, K.A.H.). (ACAD 12194).

Hygrophorus camarophyllus (Fr.) Dumée, Grandjean & Maire *in* Bull. Soc. Mycol. Fr. 28:292. 1912.
Hygrophorus caprinus Fr.
Under *Picea* sp. (spruce) and *Pinus* sp. (pine). Kings and Victoria Co. 15 Oct. 1951-K.A.H. (KM-1420, 3939-3944, 5255 *in* DAOM) (ACAD 3939, 5254, 5255).

Hygrophorus canescens Smith & Hesl. *in* Lloydia 5:10. 1942.
Camarophyllus canescens (Smith & Hesl.) Sing.
From Kings co. 1 Sept. 1972-K.A.H. (ACAD 10451, 10543) (H-11889, MICH).

Hygrophorus cantharellus (Schw.) Fr. *in* Epicr. Syst. Mycol.:329. 1838.
Hygrocybe cantharellus (Schw.) Murr.
In mixed woods. Kings, Lunenburg and Pictou Co. 18 Sept. 1951-K.A.H. (KM-1557, 2164 *in* DAOM) (ACAD 12124, 12164, 12169, 12256).

Hygrophorus capreolarius (Kalchbr.) Sacc. *in* Flora Ital. Crypt. Hymen.:342. 1915.
In conifer wood. Guysborough, Kings and Victoria Co. 15 Oct. 1951-K.A.H. (KM-1685, 3945, 5260, 5261 *in* DAOM) (ACAD 12205).

Hygrophorus ceraceus (Fr.) Fr. *in* Epicr. Syst. Mycol.:330. 1838.
Hygrocybe ceracea (Fr.) Kummer.
Under *Acer* sp. (maple) and *Fagus* sp. (beech). Colchester and Kings Co. 20 July 1931-A.S.H., L.E.W. (W-678) (ACAD 12117).

Hygrophorus chlorophanus (Fr.) Fr. *in* Epicr. Syst. Mycol.:332. 1838.
Hygrocybe chlorophana (Fr.) Wünsche.
Under *Fagus* sp. (beech). Colchester and Halifax Co. 1908-A.H.M. (L.E.W.-515, 515a).

Hygrophorus chrysodon (Fr.) Fr. *in* Epicr. Syst. Mycol.:320. 1838.
Agaricus chrysodon Fr.
In coniferous woods. Guysborough, Kings and Victoria Co. 25 Sept. 1957-K.A.H. (KM-3946, 3967 *in* DAOM) (ACAD 12204, 12238).

Hygrophorus coccineus (Fr.) Fr. sensu Ricken *in* Die Blätterpilze 1:23. 1915.
Hygrocybe coccinea (Fr.) Kummer.
Under *Tsuga* sp. (hemlock) and other conifers. Digby, Kings and Lunenburg Co. 1913-A.H.M. (KM-1595 *in* DAOM, K.A.H.) (ACAD 12100).

Hygrophorus colemannianus Blox. apud Berk. *in* Outl. Br. Fungol.:200. 1860.
Camarophyllus colemannianus (Blox. apud Berk.) Ricken.
From Kings Co. 10 Sept. 1933-K.A.H. (KM-288 *in* DAOM) (ACAD 288).

Hygrophorus conicus (Fr.) Fr. var. **conicus** *in* Epicr. Syst. Mycol.:331. 1838.
Hygrocybe conica (Scop. ex Fr.) Kummer.
On humus in mixed woods. Annapolis, Colchester and Kings Co. 1908-A.H.M. (L.E.W.-659, 659a) (KM-289, 290, 2165 *in* DAOM, K.A.H.) (ACAD 12125).

Hygrophorus conicus (Fr.) Fr. var. **atrosanguineus** Grund & Harrison *in* Can. J. Bot. 52:1243. 1974.

In needle duff in woods of *Tsuga* sp. (hemlock). Kings Co. 24 July 1973-D.W.G. (ACAD 10375).

Hygrophorus eburneus (Bull. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:321. 1838.
Agaricus eburneus Fr.
Under *Picea* sp. (spruce) and *Pinus* sp. (pine). Colchester, Halifax and Kings Co. 1880-J.S. (A.H.M.) (L.E.W.-866) (KM-892 *in* DAOM, K.A.H.) (ACAD 310, 1408, 12107).

Hygrophorus erubescens (Fr.) Fr. var. **erubescens** *in* Epicr. Syst. Mycol.:322. 1838.
In mixed woods under *Tsuga* sp. (hemlock). Kings Co. 23 Oct. 1967-C.J.B. (ACAD 12116, 12119, 12121, 12241).

Hygrophorus flavescens (Kauff.) Smith & Hesl. *in* Lloydia 5:60. 1942.
Hygrocybe flavescens (Kauff.) Sing.
On damp soil in woods. Kings, Lunenburg and Pictou Co. 27 Sept. 1967-K.A.H., C.J.B. (ACAD 12103, 12126, 12129, 12135, 12136, 12138, 12139, 12249, 12251).

Hygrophorus flavodiscus Frost apud Pk. *in* Annu. Rep. N.Y. State Mus. 35:134. 1884.
In woods of *Pinus* sp. (pine). Annapolis and Kings Co. 1913-A.H.M. (ACAD 12274 coll. K.A.H.).

Hygrophorus fuligineus Frost apud Pk. *in* Annu. Rep. N.Y. State Mus. 35:134. 1884.
On soil in conifer and mixed woods. Annapolis and Kings Co. 1913-A.H.M. (KM-300, 301, 893, 5256, 5257 *in* DAOM, K.A.H.) (ACAD 2630).

Hygrophorus gliocyclus Fr. *in* Monogr. Hymen. Suec. 2:311. 1863.
In conifer woods. Annapolis Co. 15 Oct. 1932-K.A.H. (KM-292 *in* DAOM, det. A.H.S.) (ACAD 292).

Hygrophorus hymenocephalus Smith & Hesl. *in* J. Elisha Mitchell Sci. Soc. 56:311. 1940.
Camarophyllus hymenocephalus (Smith & Hesl.) M. Lange.
On soil and decaying logs. Kings Co. 1952-J.W.G. (K.A.H. pers. comm.)

Hygrophorus hypothejus (Fr.) Fr. *in* Epicr. Syst. Mycol.:324. 1838.
Under *Pinus banksiana* Lamb. (jack pine). Richmond Co. 14 Oct. 1977-K.A.H. (MICH, H-12777).

Hygrophorus inocybiformis A.H. Smith *in* Mycologia 36:246. 1944.
Under conifers. Guysborough and Kings Co. 3 Nov. 1967-C.J.B. (ACAD 12122, 12243).

Hygrophorus laetus (Fr.) Fr. *in* Epicr. Syst. Mycol.:329. 1838.
Hygrocybe laeta (Pers. ex Fr.) Kummer.
Hygrophorus peckii Atk.
On soil and humus under conifers and hardwoods. Colchester, Kings and Lunenburg Co. 4 July 1931-A.H.S., L.E.W. (W-565 as *H. peckii*) (KM-296, 299, 1466, 3968 *in* DAOM, K.A.H.) (ACAD 12150, 12153, 12162, 12170, 12176, 12179, 12180).

Hygrophorus lignicola Bird & Grund *in* Proc. N.S. Inst. Sci. 29:85. 1979.
On *Acer saccharum* Marsh. (sugar maple). Kings Co. 8 Oct. 1968-C.J.B., D.W.G. (ACAD 12222 holotype).

Hygrophorus limacinus (Scop. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:324. 1838.
Agaricus limacinus Schaeff. ex Pers.
Hygrophorus dichrous Kühner & Romagn.
From Lunenburg Co. 1913-A.H.M. (not recognized since).

Hygrophorus macrosporus Bird & Grund *in* Proc. N.S. Inst. Sci. 29:124. 1979.
In woods of *Tsuga* sp. (hemlock). Kings Co. 18 Sept. 1967-C.J.B., D.W.G. (ACAD 12099).

Hygrophorus marchii Bres. *in* Icon. Mycol. 7:343. 1928.
Hygrocybe marchii (Bres.) Sing.
In mixed woods. Pictou Co. 14 Oct. 1968-K.A.H. (ACAD 12255).

Hygrophorus marginatus Pk. var. **marginatus** *in* Annu. Rep. N.Y. State Mus. 28:50. 1876.
Hydrocybe marginata (Pk.) Murr.
On humus under *Acer.* sp. (maple). Colchester, Kings and Lunenburg Co. 18 July 1931-A.H.S., L.E.W. (W-661, 661a) (KM-297, 298, 1468 *in* DAOM, K.A.H.) (ACAD 12149, 12152, 12178, 12183).

Hygrophorus marginatus Pk. var. **concolor** A.H. Smith *in* Pap. Mich. Acad. Sci. Arts Lett. 38:59. 1953.
Scattered at edges of swamp. Kings Co. 18 Sept. 1977-C.J.B. (ACAD 12437).

Hygrophorus miniatus (Fr.) Fr. var. **miniatus** *in* Epicr. Syst. Mycol.:330. 1838.
Hygrocybe miniata (Scop. ex Fr.) Kummer.
Under mixed woods. Colchester, Digby, Kings and Lunenburg Co. 1908-A.H.M. (L.E.W.-651, 651a) (KM-894, 1593, 3969 *in* DAOM, K.A.H.). (ACAD 12160, 12167, 12187).

Hygrophorus minutulus Pk. *in* Bull. N.Y. State Mus. 1(2):9. 1887.
Hydrocybe minutula (Pk.) Murr.
In grass. Rare. Kings Co. 30 Aug. 1956-C.J.B. (ACAD 6263).

Hygrophorus monticola Hesl. & Smith *in* North Am. Spec. of *Hygrophorus*:359. 1963.
In coniferous woods. Guysborough, Kings and Victoria Co. 1913-A.H.M. (as *H. distans* Berk.) (KM-1401, 2049, 2644-2646 as *H. odorus,* 5266 *in* DAOM, K.A.H.) (ACAD 12109, 12122, 12240, 12244).

Hygrophorus murinus Bird & Grund *in* Can. J. Bot. 48:408. 1970.
In mixed woods. Guysborough and Kings Co. 3 Nov. 1967-C.J.B. (ACAD 12120, 12258, coll. K.A.H.).

Hygrophorus nitidus Berk. & Curt. *in* Ann. Mag. Nat. Hist. Ser. 2, 12:424. 1853.
Hydrocybe nitida (Berk & Curt.) Murr.
In deciduous or coniferous woods. Colchester, Hants, Kings and Queens Co. 15 July 1931-A.H.S., L.E.W. (W-632) (KM-299 *in* DAOM, K.A.H.) (ACAD 12130, 12147, 12148, 12161, 12174, 12235).

Hygrophorus nitiosus Blytt *in* Norg. Hymen. Vidensk. Selsk. Skrift. 1. Math.-Nat. Kl. 1904. No. 6:88. 1905.
Hygrocybe ingrata Jensen & Möller.
Hygrocybe nitiosa (Blytt) Moser apud Gams.
In grassy clearings. Kings Co. 7 July 1968-H.L.S. (ACAD 12137).

Hygrophorus nitratus (Pers. ex Pers.) Fr. *in* Hymen. Eur.:421. 1874.
Hygrophorus nitrata (Pers. ex Pers.) Wünsche.
Hygrophorus murinaceus (Bull. ex Fr.) Fr.
Tricholoma murinaceum (Bull. ex Fr.) Gill.
From Halifax Co. 1886-J.S. (as *T. murinaceum*).

Hygrophorus niveus Fr. *in* Epicr. Syst. Mycol.:327. 1838.
Hydrocybe nivea (Scop.) Murr.
On lawn. Kings and Pictou Co. 8 Oct. 1952-K.A.H. (KM-2170, 2635 *in* DAOM) (ACAD 12113, 12266).

Hygrophorus odoratus Smith & Hesl. *in* Sydowia 8:310. 1954.
In conifer woods. Guysborough and Pictou Co. 14 Oct. 1968-K.A.H. (ACAD 12260, 12267, 12268, 12269).

Hygrophorus olivaceoalbus (Fr.) Fr. var. **olivaceoalbus** *in* Epicr. Syst. Mycol.: 324. 1838.

Under conifers. Guysborough, Hants and Kings Co. 19 Oct. 1958-K.A.H., J. Cur. (KM-3938, 5262 *in* DAOM) (ACAD 12110, 12210, 12261, 12282).

Hygrophorus pacificus Smith & Hesl. *in* Lloydia 2:42. 1939.

Under *Picea* sp. (spruce). Kings Co. 21 Sept. 1955-K.A.H. (Hesler & Smith 1963).

Hygrophorus pratensis (Fr.) Fr. var. **pratensis** *in* Epicr. Syst. Mycol.:326. 1838.

Camarophyllus pratensis (Fr.) Kummer.

On soil in mixed woods. Colchester, Hants, Kings and Pictou Co. 18 July 1931-A.H.S., L.E.W. (W-668, 778) (KM-302, 303, 304, 888, 1471, 2640, 5264 *in* DAOM, K.A.H.) (ACAD 2639, 12248).

Hygrophorus psittacinus (Fr.) Fr. var. **psittacinus** *in* Epicr. Syst. Mycol.:332. 1838.

Hygrocybe psittacina (Fr.) Kummer.

On humus in mixed woods. Colchester, Inverness, Kings and Lunenburg Co. 18 July 1931-A.H.S., L.E.W. (W-660) (KM-932, 2171 *in* DAOM, K.A.H.) (ACAD 12105, 12108, 12143, 12157, 12175).

Hygrophorus pudorinus (Fr.) Fr. var. **pudorinus** f. **pudorinus** *in* Epicr. Syst. Mycol.:332. 1838.

In bogs and mixed conifer woods. Annapolis, Kings and Pictou Co. 1913-A.H.M. (KM-533, 971, 2635, 5141 *in* DAOM, K.A.H.) (ACAD 5258, 12115, 12259, 12272).

Hygrophorus puniceus (Fr.) Fr. *in* Epicr. Syst. Mycol.:331. 1838.

Hygrocybe punicea (Fr.) Kummer.

Hydrocybe punicea (Fr.) Karst.

On humus in mixed woods. Colchester, Halifax, Kings, Lunenburg and Yarmouth Co. 1913-A.H.M. (L.E.W.-814) (KM-287, 889, 2638 *in* DAOM, K.A.H.) (ACAD 12193, 12246).

Hygrophorus purpurascens (Alb. & Schw. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:322. 1838.

Agaricus purpurascens Fr.

Limacium purpurascens (Fr.) Kummer.

In coniferous woods. Kings Co. 27 Oct. 1968-K.A.H. (ACAD 12277).

Hygrophorus pustulatus (Fr.) Fr. *in* Hymen. Eur.:411. 1874.

Agaricus pustulatus Fr.

Limacium pustulatum (Fr.) Kummer.

In woods of *Picea* sp. (spruce). Kings Co. 29 Oct. 1968-C.J.B. (ACAD 12286).

Hygrophorus rainierensis Hesl. & Smith *in* North Am. Spec. of *Hygrophorus*:64. 1963.

Hygrophorus foetans Phill.

Hygrophorus peckianus Howe.

In mixed conifer-hardwood forests. Kings Co. 9 Oct. 1933-K.A.H. (KM-293, 2634 *in* DAOM as *H. foetans,* fide A.H.S.) (ACAD 11978).

Hygrophorus ruber Pk. *in* Bull. N.Y. State Mus. 116:32. 1907.

Hydrocybe ruber (Pk.) Murr.

In mixed woods. Pictou and Queens Co. 14 Oct. 1968-K.A.H. (ACAD 10567 coll. R.H.P., 12250, 12270).

Hygrophorus russula (Schaeff. ex Fr.) Quél. *in* Ench. Fung.:49. 1886.

In woods under *Acer* sp. (maple) and *Fagus* sp. (beech). Colchester and Kings Co. 27 Aug. 1931-A.H.S., L.E.W. (W-835) (KM-305, 306, 968-970, 5138 *in* DAOM, K.A.H.) (ACAD 12217, 12281).

Hygrophorus speciosus Pk. var. **speciosus** *in* Annu. Rep. N.Y. State Mus. 29:43. 1878.

In coniferous woods. Halifax and Queens Co. 1888-J.S. (KM-5263, K.A.H. as *H. aureus*) (ACAD 12233).

Hygrophorus subfuscescens Smith & Hesl. var. **subfuscescens** *in* Sydowia 8:317. 1954.
In sphagnum. Kings Co. 4 Sept. 1973-K.A.H. (ACAD 10542).

Hygrophorus tennesseensis Smith & Hesl. *in* Lloydia 2:40. 1939.
Under conifers in mixed woods. Digby and Kings Co. 5 Oct. 1931-K.A.H. (KM-294, 295, 5258, 5259 *in* DAOM, fide A.H.S. as *H. laurae* Morg.) (ACAD 1764, 2637, 10551).

Hygrophorus tephroleucus (Fr.) Fr. var. **tephroleucus** *in* Epicr. Syst. Mycol.:328. 1838.
Agaricus tephroleucus Fr.
Under conifers. Guysborough, Kings and Queens Co. 11 Oct. 1968-C.J.B., D.W.G. (ACAD 12232, 12242, 12279).

Hygrophorus unguinosus (Fr.) var. **unguinosus** *in* Epicr. Syst. Mycol.:332. 1838.
Hygrocybe unguinosa (Fr.) Karst.
In coniferous and mixed woods. Cape Breton and Colchester Co. 4 Sept. 1931-A.H.S., L.E.W. (W-875) (ACAD 8631).

Hygrophorus virgineus (Fr.) *in* Epicr. Syst. Mycol.:327. 1838.
Camarophyllus virgineus (Fr.) Kummer.
In wooded areas. Annapolis and Kings Co. 20 Oct. 1952-K.A.H. (KM-1791, 2153 *in* DAOM) (ACAD 7190).

Hymenochaete agglutinans Ell. *in* Bull. Torrey Bot. Club 5:46. 1874.
On *Alnus incana* (L.) Moench (speckled alder), *Betula* sp. (birch), *Fagus grandifolia* Ehrh. (beech) and *Quercus rubra* L. (red oak). Cumberland and Halifax Co. 1950-L.E.W. (O-F4476) (KM-4316 *in* DAOM, K.A.H.).

Hymenochaete badio-ferruginea (Mont.) Lév. *in* Ann. Sci. Nat. Bot., Sér. 3, 5:152. 1846.
On branches of *Abies* sp. (fir), *Acer* sp. (maple), *Betula* sp. (birch), *Fagus* sp. (beech) and *Populus* sp. (poplar). Colchester and Kings Co. 29 June 1931-L.E.W. (W-344, 344a, 345) (O-F3221).

Hymenochaete corrugata (Fr.) Lév. *in* Ann. Sci. Nat. Bot., Sér. 3, 5:152. 1846.
On branches of *Acer* sp. (maple), *Alnus* sp. (alder), *Betula* sp. (birch), *Fagus* sp. (beech) and *Malus* sp. (apple). Colchester and Kings Co. 28 Sept. 1926-L.E.W. (W-109, 317, 359) (KM-129, 129a, 130, 3083 *in* DAOM, K.A.H.). (O-F5131).

Hymenochaete corticolor Berk. & Rav. *in* Ravenel, Fungi Caroliniani Exs., fasc. 3:30. 1855.
On stems of *Fagus grandifolia* Ehrh. (beech). Colchester Co. 16 July 1929-L.E.W. (W50, 51, fide M.A.D.).

Hymenochaete rubiginosa (Dicks. ex Fr.) Lév. *in* Ann. Sci. Nat. Bot., Sér. 3, 5:151. 1846.
On old tree trunks. 1881-J.S. (A.H.M.).

Hymenochaete spreta Pk. *in* Annu. Rep. N.Y. State Mus. 30:47. 1879.
On *Acer spicatum* Lam. (mountain maple) and *Fagus grandifolia* Ehrh. (beech). Colchester Co. 3 Sept. 1928-L.E.W. (W-21, 398, 444, 1073, fide M.A.D.).

Hymenochaete tabacina (Sow. ex Fr.) Lév. *in* Ann. Sci. Nat. Bot., Sér. 3, 5:152. 1846.
On *Abies balsamea* (L.) Mill. (balsam fir), *Acer pensylvanicum* L. (striped maple), *A. rubrum* L. (red maple), *A. saccharum* Marsh. (sugar maple), *A. spicatum* Lam. (mountain maple), *Alnus* sp. (alder), *Betula papyrifera* Marsh. (white birch), *Fagus grandifolia* Ehrh. (beech), *Picea* sp. (spruce), *Populus grandidentata* Michx. (largetoothed aspen), *Prunus* sp. (stone fruit), *Rubus* sp. (bramble), *Salix* sp. (willow), *Taxus canadensis* Marsh. (Canada yew) and *Ulmus* sp. (elm). General. 3 Sept. 1926-L.E.W. (W-111, 346, 346a, 1022, 1127, 1290) (KM-122, 125, 128 *in* DAOM, K.A.H.) (O-F3226).

★**Hymenogaster tener** Berk. & Br. *in* Ann. Mag. Nat. Hist. 1, 18:75. 1846.
From Kings Co. 1953-K.A.H. (ACAD 5990).

★**Hyphodontia arguta** (Fr.) Erikss. *in* Symb. Bot. Upsal. 16(1):104. 1958.
Odontia arguta (Fr.) Quél.
On *Abies balsamea* (L.) Mill. (balsam fir). Kings Co. 22 Oct. 1953-K.A.H. (KM-2833, 2837 *in* DAOM, det. R.M.).

Hyphodontia breviseta (Karst.) Erikss. *in* Symb. Bot. Upsal., 16(1):104. 1958.
On *Abies balsamea* (L.) Mill. (balsam fir), *Betula* sp. (birch) and other coniferous and deciduous wood. 1975-L.P.M., J.M.M.

*****Hypocrea aurantiaca** Pk. *in* Annu. Rep. N.Y. State Mus. 51:295. 1898.
On old polypore fungus. Kings Co. 2 Nov. 1953-K.A.H. (KM-4625 det. C.T.R. *in* DAOM).

Hypocrea citrina (Pers. ex Fr.) Fr. *in* Summa Veg. Scand.:383. 1849.
Hypocrea lactea (Fr. ex Fr.) Fr.
Stat. conid. *Trichoderma* sp.
On *Fomes applanatus* (Pers.) Gill. and *Fomes pinicola* (Swartz) Cke. Colchester Co. 4 July 1931-L.E.W. (W-386, 468).

Hypocrea gelatinosa (Tode ex Fr.) Fr. *in* Summa Veg. Scand.:383. 1849.
Chromocrea gelatinosa (Fr.) Seav.
Creopus gelatinosus (Fr.) Lk.
On *Alnus* sp. (alder) and deciduous wood. Annapolis and Colchester Co. 14 Aug. 1935-L.E.W. (W-1680) (KM-4611 conf. R.A.S., 4616 det. C.T.R. *in* DAOM, K.A.H.).

★**Hypocrea latizonata** Pk. apud Ell. & Ev. *in* North Am. Pyren.:79. 1892.
Parasite on *Cyathus striatus* Pers. on woody debris on lawn. Kings Co. 8 Oct. 1980-K.A.H. (ACAD 13623).

Hypocrea patella Cke. & Pk. *in* Annu. Rep. N.Y. State Mus. 29:57. 1878.
On decayed log of *Fagus grandifolia* Ehrh. (beech) and *Fomes igniarius* var. *nigricans* Fr. Colchester and Kings Co. 20 July 1931-L.E.W. (W-1094) (KM-1646 *in* DAOM, K.A.H.).

Hypocrea rufa (Pers.) Fr. *in* Summa Veg. Scand.:383. 1849.
Stat. conid. *Trichoderma viride* Pers. ex S.F. Gray.
On *Alnus* sp. (alder) and *Fagus grandifolia* Ehrh. (beech). Colchester Co. 11 July 1931-L.E.W. (W-494, 494a).

★**Hypocrea semiorbis** Berk. *in* J. Bot., tab. 5, fig. 2. 1840.
On *Acer* sp. (maple). Cumberland Co. 8 Sept. 1959-K.A.H. (KM-4613 *in* DAOM, det. R.A.S.).

★**Hypocrea sulphurea** (Schw.) Sacc. *in* Syll. Fung. 2:535. 1883.
On old stump. Kings Co. 24 Sept. 1959-K.A.H. (KM-4612 *in* DAOM, det. R.A.S.).

Hypoderma rufilabrum (Berk. & Curt.) Duby *in* Mém. Soc. Phys. Hist. Nat. Genève 16:41. 1861.
On twigs of *Acer spicatum* Lam. (mountain maple). Colchester Co. 16 July 1931-L.E.W. (W-1061).

Hypodermella laricis Tub. *in* Bot. Centralbl. 61:49. 1895.
Stat. conid. *Leptothyrella laricis* Dearn.
Needle cast fungus on *Larix laricina* (DuRoi) K. Koch (larch, tamarack). Hants Co. 1973. (For. Insect Dis. Surv. Annu. Rep.:28. 1973).

Hypomyces apiculatus (Pk.) Seav. *in* Mycologia 2:73. 1910.
Hypocrea apiculata Pk.
On humus of old stump. Colchester Co. 7 Sept. 1931-L.E.W. (W-1475).

Hypomyces aurantius (Pers. ex Fr.) Tul. *in* Ann. Sci. Nat. Bot., Sér. 4, 13:12. 1860.
Stat. conid. *Cladobotryum variospermum* (Link) Hughes.

On *Boletus, Exidia, Irpex and Polyporus versicolor* (L.) Fr. Colchester and Halifax Co. 14 July 1929-L.E.W. (W-99, 1178, 1397) (KM-4626 *in* DAOM, K.A.H.).

Hypomyces chrysospermus (Bull.) Tul. *in* Sel. Fung. Carp. 3:51. 1865.
On *Boletus*. Colchester Co. 29 Aug. 1931-L.E.W. (W-1455) leg. A.H.S.

Hypomyces hyalinus (Schw. ex Fr.) Tul. *in* Ann. Sci. Nat. Bot., Sér. 4, 13:15. 1860.
Usually on *Amanita rubesens* (Pers. ex Fr.) S.F. Gray. Annapolis, Colchester, Digby and Kings Co. 18 Aug. 1931-L.E.W. (W-1350) (KM-1204, 1205, 1249, 1750, 4620, 4621, 4627 *in* DAOM, K.A.H.).

Hypomyces lactifluorum (Schw. ex Fr.) Tul. *in* Sel. Fung. Carp. 3:63. 1865.
Usually on *Lactarius deceptivus* Pk. and *L. vellereus* (Fr.) Fr., but also reported on *Cantharellus, Gomphidius* and various agarics. Annapolis, Colchester, Halifax, Kings, Lunenburg and Pictou Co. 1890-J.S. (A.H.M.) (L.E.W.-1099 leg. A.R.P.) (KM-962, 1206, 1207, 4618 *in* DAOM, K.A.H.) (ACAD 11927, an albino variant, K.A.H., D.W.G.).

★**Hypomyces lateritius** (Fr.) Tul. *in* Sel. Fung. Carp. 3:62. 1865.
On *Lactarius* sp. Victoria Co. 30 Aug. 1957-K.A.H., J. Cur. (KM-4622 *in* DAOM).

★**Hypomyces luteovirens** (Fr.) Tul. *in* Ann. Sci. Nat. Bot., Sér. 4, 13:8. 1860.
On species of *Russula* fungus. Richmond Co. 1 Sept. 1957-K.A.H., J. Cur. (KM-4628 *in* DAOM).

Hypomyces polyporinus Pk. *in* Annu. Rep. N.Y. State Mus. 26:84. 1874.
On *Polyporus versicolor* (L.) Fr. Colchester Co. 19 Aug. 1931-L.E.W. (W-1368).

Hypomyces rosellus (Alb. & Schw.) Tul. *in* Ann. Sci. Nat. Bot., Sér. 4, 13:12. 1860.
Stat. conid. *Cladobotryum denroides* (Bull. ex Mérat) Gams & Hoozem.
On decayed *Poria* sp. Colchester Co. 24 Aug. 1931-L.E.W. (W-1396).

★**Hypoxylon atropunctatum** (Schw. ex Fr.) Cke. *in* Grevillea 11:138. 1883.
Anthostoma atropunctatum (Schw.) Sacc.
On wood of *Quercus rubra* L. (red oak). Kings Co. 4 April 1953-K.A.H., D.W.C.

Hypoxylon cohaerans (Pers. ex Fr.) Fr. *in* Summa Veg. Scand.:384. 1849.
On *Fagus grandifolia* Ehrh. (American beech). Colchester, Kings and Pictou Co. 1908-A.H.M. (KM-1211 *in* DAOM, K.A.H.) (L.E.W.-326, 6074 leg. A.R.P.).

Hypoxylon deustum (Hoffm. ex Fr.) Grev. *in* Scott. Crypt. Flora 6, tab. 324, fig. 2. 1828.
On *Acer saccharum* Marsh. (sugar maple), *Aesculus hippocastanum* L. (horse chestnut), *Betula lutea* Michx. f. (yellow birch) *Fagus grandifolia* Ehrh. (beech) and *Quercus rubra* L. (red oak). Halifax and Victoria Co. 14 June 1925-L.E.W. (W-1134, 1228, leg. A.R.P.).

Hypoxylon fragiforme (Pers. ex Fr.) Kickx *in* Flore Crypt. Environs Louvain Brux.:116. 1835.
On *Fagus grandifolia* Ehrh. (beech). Colchester and Halifax Co. 16 June 1926-L.E.W. (W-318a,b) (DAOM 112913) (ACAD 5173, K.A.H.).

Hypoxylon fuscum (Pers. ex Fr.) Fr. *in* Summa Veg. Scand.:384. 1849.
On *Alnus* sp. (alder), *Alnus crispa* var. *mollis* Fern. (downy alder) and *Corylus cornuta* Marsh. (beaked hazelnut). Colchester, Kings and Pictou Co. 1908-A.H.M. (L.E.W.-446, P384, P385a) (KM-1212 *in* DAOM, K.A.H.) (O-4925, I.L.C.)

Hypoxylon mammatum (Wahl.) Miller *in* Monogr. World Spec. of *Hypoxylon*:64. 1961.
Hypoxylon pruinatum (Klotz.) Cke.
On *Alnus* sp. (alder), *Betula* sp. (birch), *Populus* sp. (poplar) and *Salix* sp. (willow). Colchester and Kings Co. 1930-J.F.H. (L.E.W.-1123, 1128) (DAOM 7850, R.M.L. det. I.L.C.) (KM-5174 *in* DAOM, K.A.H.).

Hypoxylon multiforme (Fr.) Fr. *in* Summa Veg. Scand.:384. 1849.
On *Betula lutae* Michx. f. (yellow birch) and *B. papyrifera* Marsh. (white birch). Halifax Co. 14 June 1925-L.E.W. leg. A.R.P. (102).

Hypoxylon rubiginosum (Pers. ex Fr.) Fr. *in* Summa Veg. Scand.:384. 1849.
On *Acer spicatum* Lam. (mountain maple). Colchester and Victoria Co. 18 July 1929-L.E.W. (W-137, 1149, 1153, 1226, 1251).

Hypoxylon sp.
On wood of *Acer* sp. (maple). Kings Co. 8 Nov. 1954-K.A.H. (KM-3082 *in* DAOM sensu R.M.).

Hypsizygus tessulatus (Bull. ex Fr.) Sing. *in* Mycologia 39:78. 1947.
Lyophyllum ulmarium (Bull. ex Fr.) Kühner.
Pleurotus ulmarius (Fr.) Quél.
On *Populus* sp. (poplar). Colchester and Kings Co. 1908-A.H.M. (KM-459, 460, 2730, 5409 *in* DAOM, K.A.H.).

Hysterium pulicare Pers. ex Mérat *in* Nouv. Flore de Paris 1:153. 1821.
On bark of *Betula* sp. (birch) and *Populus nigra* L. var. *italica* Muenchh. (Lombary poplar). Colchester, Pictou and Victoria Co. 1908-A.H.M. (L.E.W.-1107, 1225, 1459 det. M.L.L.).

Hysterographium mori (Schw.) Rehm *in* Ascomyceten:363. 1876.
On *Fagus grandifolia* Ehrh. (beech) and *Populus* sp. (poplar). Colchester Co. 1 Aug. 1931-L.E.W. (W-1197, 1276, det. M.L.L.).

Hysteropatella minor (Cke.) Rehm *in* Ann. Mycol. 10:396.1912.
On decorticated wood of *Betula* sp. (birch) and *Fagus* sp. (beech). Colchester Co. 7 July 1931-L.E.W. (W-443, 1077, 1662 det. E.T.W.).

★**Incrustoporia semipileata** (Pk.) Donk *in* Proc. K. Ned. Akad. Wet., Ser. C, Biol. Med. Sci. 74(1):39. 1971.
Polyporus semipileatus Pk.
Tyromyces semipileatus (Pk.) Murr.
On *Amelanchier* sp. Cumberland Co. 8 Sept. 1959-K.A.H. (KM-4227 *in* DAOM, det. R.M.) (ACAD 4227).

Incrustoporia subincarnata (Pk.) Domanski *in* Acta Soc. Bot. Polon. 32:737. 1963.
Poria subincarnata (Pk.) Murr.
On *Abies balsamea* (L.) Mill. (balsam fir) and *Picea* sp. (spruce). Colchester, Kings and Victoria Co. 11 July 1931-L.E.W. (W-491, 1231) (KM-106, 106a *in* DAOM, K.A.H.) (O-F5132, 5133) (ACAD 106a).

Inocybe abjecta Karst. *in* Hattsvampar 1 32:456. 1879, sensu J. Lange, R. Kühner.
In needle duff in woods of *Tsuga* sp. (hemlock). Kings Co. 19 Sept. 1967-D.W.G. (ACAD 1925).

Inocybe acriolens Grund & Stuntz *in* Mycologia 67:19-21. 1975.
In woods of *Abies* sp. (fir) and *Picea* sp. (spruce). Kings Co. 1975-D.W.G., D.E.S. (ACAD 10493 coll. K.A.H. 19 Aug. 1973).

Inocybe acuta Boud. *in* Bull. Soc. Mycol. Fr. 33:8. 1917.
Scattered under *Tsuga* sp. (hemlock). Kings Co. 1977-D.W.G., D.E.S. (ACAD 11599 coll. H.L.S. 22 Sept. 1966).

Inocybe albodisca Pk. *in* Annu. Rep. N.Y. State Mus. 51:290. 1898.
Inocybe grammata Quél.
Inocybe hiulca (Fr.) Karst.
On bare soil in mixed woods. Kings Co. 17 Aug. 1976-D.W.G., D.E.S. (ACAD 11669, 11762).

Inocybe apiosmota Grund & Stuntz *in* Mycologia 67:21-22. 1975.
In gravel and humus in a swamp. Kings Co. 1975-D.W.G., D.E.S. (ACAD 10560 coll. D.W.G. 4 Sept. 1968).

Inocybe aurora Grund & Stuntz *in* Mycologia 67:24-25. 1975.
Under *Picea* sp. (spruce) or *Tsuga* sp. (hemlock). Lunenburg and Kings Co. 1975-D.W.G., D.E.S. (ACAD 10213 coll. D.W.G. 10245, 10561 coll. H.S.).

Inocybe brunneolipes Grund & Stuntz *in* Mycologia 62:928-929. 1970.
On sandy soil under conifers. Kings Co. 1970-D.W.G., D.E.S. (ACAD 1863 coll. D.W.G. 7 Sept. 1966).

Inocybe calamistrata (Fr.) Gill. var. **calamistrata** *in* Hymén. Fr.:513. 1874.
On soil under *Picea* sp. (spruce). Colchester, Hants and Kings Co. 4 July 1931-A.H.S., L.E.W. (W-570) (KM-321, 984, 2667 *in* DAOM, K.A.H.).

Inocybe calamistrata (Fr.) Gill. var. **mucidiolens** Grund & Stuntz *in* Mycologia 62:929-931. 1970.
In moss or needle duff under conifers. Colchester and Lunenburg Co. 1970-D.W.G., D.E.S. (ACAD 1824 coll. H.L.S. 13 Aug. 1966, 1951 coll. D.W.G.).

Inocybe calospora Quél. *in* Bresadola, Fungi Tridentini 1:19. 1982.
On wet soil under mixed wood. Kings Co. 27 Aug. 1976-D.W.G., D.E.S. (ACAD 11716).

Inocybe chalcodoxantha Grund & Stuntz *in* Mycologia 60:408-409. 1968.
In moss or needles under conifers. Kings Co. 1968-D.W.G., D.E.S. (ACAD 1817 coll. D.W.G. 14 Aug. 1966).

Inocybe cincinnata (Fr.) Quél;. *in* Champ. Jura et Vosges 1:152. 1872.
On sandy soil. Colchester Co. 29 Aug. 1931-A.H.S., L.E.W. (W-844).

Inocybe cincinnatula Kühner *in* Bull. Soc. Nat. Oyonnax, Mém. Hors Sér. 1: 86. 1955.
Under *Pinus* sp. (pine) or *Tsuga* sp. (hemlock). Kings Co. 1968-D.W.G., D.E.S. (ACAD 1878, 1883, coll. H.L.S. 22 Sept. 1966).

Inocybe decipiens Bres. *in* Fungi Tridentini 2:13, tab. 118. 1892.
From Victoria Co. 31 Aug. 1957-K.A.H. (KM-4108 *in* DAOM).

Inocybe decipientoides Pk. *in* Bull. Torrey Bot. Club 34:100. 1907.
In needles in woods of *Abies* sp. (fir) and *Picea* sp. (spruce). Kings Co. 1968-D.W.G., D.E.S. (ACAD 1870 coll. D.W.G. 14 Aug. 1966).

Inocybe fastigiata (Schaeff. ex Fr.) Quél. *in* Champ. Jura et Vosges:180. 1872.
On sandy soil. Colchester and Kings Co. 1886-J.S. (A.H.M.) as *I. rimosa* Fr. (L.E.W.-510, 612, 664) (KM-323, 324, 535 as *I. rimosa* fide A.H.S.).

Inocybe fastigiata (Schaeff. ex Fr.) Quél. f. **subcandida** Malençon apud Malençon & Bertault *in* Flore Champ. Super. Maroc. 1:361. 1970.
In moss on ground in mixed woods. Kings Co. 20 Aug. 1968-D.W.G., D.E.S. (ACAD 13616, leg. K.A.H.).

Inocybe fulvella Bres. *in* Fungi Tridentini 2:16. 1892.
On soil under hardwoods. Kings Co. 12 Aug. 1976-D.W.G., D.E.S. (ACAD 11629 coll. K.A.H.).

Inocybe fuscicothurnata Grund & Stuntz *in* Mycologia 67:27-28. 1975.
In woods of *Tsuga* sp. (hemlock). Kings Co. 1975-D.W.G., D.E.S. (ACAD 9919 coll. D.W.G. 21 Sept. 1970).

Inocybe fuscodisca (Pk.) Massee *in* Ann. Bot. 18:487. 1904.
On needle litter under *Picea* sp. (spruce). Kings Co. 1970-D.W.G., D.E.S. (ACAD 1969 coll. D.W.G. 16 Sept. 1969).

Inocybe gausapata Kühner *in* Bull. Soc. Nat. Oyonnax, Mém. Hors Sér. 1:4. 1955.
On soil near *Tsuga canadensis* (L.) Carr. (hemlock). Kings Co. 31 Aug. 1972-D.W.G. (ACAD 10258).

Inocybe geophylla (Sow. ex Fr.) Kummer *in* Führ. in Pilzkd.:79. 1871, var. **lilacina** Gill. *in* Hymén. Fr.:520. 1874.
On mossy hillsides. Colchester Co. 26 Aug. 1931-A.H.S., L.E.W. (W-820) (KM-2668 *in* DAOM, K.A.H.).

Inocybe griseoscabrosa (Pk.) Earle *in* Torreya 3:169. 1903.
Agaricus (Hebeloma) griseoscabrosa Pk.

On soil in mixed woods. Kings Co. 9 Aug. 1976-D.W.G., D.E.S. (ACAD 11614 coll. H.S.).

Inocybe hirsuta (Lasch) Quél. var. **hirsuta,** *in* Champ. Jura et Vosges:151. 1872.
In moss or in needle duff in conifer woods, or along roadsides. Kings Co. 1975-D.W.G., D.E.S. (ACAD 10257 coll. D.W.G. 31 Aug. 1972).

Inocybe hirsuta (Lasch) Quél. var. **maxima** A.H. Smith *in* Pap. Mich. Acad. Sci. Arts Lett. 24:96. 1939.
On soil under *Tsuga* sp. (hemlock). Kings Co. 14 Aug. 1976-D.W.G., D.E.S. (ACAD 11640 and 11733 coll. K.A.H.).

Inocybe holoxantha Grund & Stuntz *in* Mycologia 73:667. 1981.
On ground in mixed woods. Kings Co. 18 Aug. 1976-D.W.G., D.E.S. (ACAD 11683, leg. K.A.H.).

Inocybe hystrix (Fr.) Karst. *in* Bidr. Finl. Nat. Folk 32:453. 1879.
On humus in mixed woods. Annapolis and Colchester Co. 18 Aug. 1931-A.H.S., L.E.W. (W-773) (ACAD 11645 coll. K.A.H.).

Inocybe lacera (Fr.) Kummer var. **lacera** *in* Führ. in Pilzkd.:79. 1871.
On soil along roadside. Colchester Co. 3 July 1931-A.H.S., L.E.W. (W-558) (ACAD 10214, K.A.H., 1981).

Inocybe lacera (Fr.) Kummer var. **heterosperma** Grund & Stuntz *in* Mycologia 69:403. 1977.
Gregarious in roadside gravel. Annapolis Co. 1977-D.W.G., D.E.S. (ACAD 11605 coll. C.J.B. 25 May 1969).

Inocybe lacera (Fr.) Kummer f. **subsquarrosa** Möller *in* Fungi of Faeröes 1:226. 1945.
On bare ground on roadway near *Acer* sp. (maple), *Betula* sp. (birch) and *Fagus* sp. (beech). Kings Co. 27 Aug. 1976-D.W.G., D.E.S. (ACAD 11715, leg. K.A.H.).

Inocybe lanatodisca Kauff. var. **lanatodisca** *in* Agar. Mich.:459. 1918.
In needles under *Abies* sp. (fir) and *Picea* sp. (spruce). Kings Co. 1968-D.W.G., D.E.S. (ACAD 1864 coll. D.W.G. 7 Sept. 1966, 1877, 1952).

Inocybe lanatodisca Kauff. var. **phaeoderma** (Stuntz) Grund & Stuntz *in* Mycologia 67:30-31. 1975.
From Colchester Co. 1975-D.W.G., D.E.S. (ACAD 10563, 10564 coll. H.L.S. 13 Aug. 1966, 10565).

Inocybe leptophylla Atk. *in* Am. J. Bot. 5:212. 1918.
On rotten wood and debris. Colchester Co. 1 July 1931-A.H.S., L.E.W. (W-543, 543a).

Inocybe longicystis Atk. *in* Am. J. Bot. 5:213. 1918.
In needles under *Abies* sp. (fir) or other conifers. Colchester and Lunenburg Co. 15 July 1931-A.H.S., L.E.W. (W-633) (ACAD 1805, 1811 coll. H.L.S. 21 Aug. 1966).

Inocybe maculata Boud. *in* Bull. Soc. Bot. Fr. 32:283. 1885.
On clay or sandy soil or in moss in conifer or mixed woods. Colchester and Kings Co. 1968-D.W.G., D.E.S. (ACAD 1826 coll. H.L.S. 13 Aug. 1966, 1853).

Inocybe maritimoides (Pk.) Sacc. *in* Syll. Fung. 5:771. 1887.
In needle duff or moss under *Picea* sp. (spruce) and *Tsuga* sp. (hemlock). Kings Co. 1977-D.W.G., D.E.S. (ACAD 10463, 10485 coll. D.W.G. 15 Aug. 1973, 11681).

Inocybe melleiconica Grund & Stuntz *in* Mycologia 60:416-418. 1968.
On soil under *Tsuga canadensis* (L.) Carr. (hemlock). Kings Co. 1968-D.W.G., D.E.S. (ACAD 1906 coll. H.L.S. 4 Oct. 1966).

Inocybe microteroxantha Grund & Stuntz *in* Mycologia 73:658. 1981.
On soil under hardwoods or mixed woods. Kings Co. 31 Aug. 1976-D.W.G., D.E.S. (ACAD 11766, leg. K.A.H.).

Inocybe mixtilis (Britz.) Sacc. *in* Syll. Fung. 5:780. 1887.
Agaricus mixtilis Britz.
On soil under mixed woods. Kings Co. 17 Aug. 1976-D.W.G., D.E.S. (ACAD 11659, 11695 coll. K.A.H.).

Inocybe multicoronata A.H. Smith *in* Pap. Mich. Acad. Sci. Arts Lett. 24:95. 1939.
In moss and needles under *Picea* sp. (spruce). Colchester and Kings Co. 1939-A.H.S. (ACAD 1818 coll. D.W.G. 14 Aug. 1966, 1818A).

Inocybe napipes J. Lange *in* Dan. Bot. Ark. 2(7):44. 1917.
Under *Tsuga* sp. (hemlock), among ferns. Kings Co. 1970-D.W.G., D.E.S. (ACAD 1821 coll. D.W.G. 11 Aug. 1966).

Inocybe nemorosa (Heim) Grund & Stuntz *in* Mycologia 60:420-421. 1968.
In soil under conifers, or under *Fagus* sp. (beech) in mixed woods, sometimes among ferns. Kings Co. 1968-D.W.G., D.E.S. (ACAD 1844, 1851, 1857 coll. D.W.G. 7 Sept. 1966, 1870A, 1880, 2882, 1887, 1904).

Inocybe neobrunnescens Grund & Stuntz var. **neobrunnescens** *in* Mycologia 62: 934-935. 1970.
In moss under *Abies* sp. (fir) and *Picea* sp. (spruce). Colchester Co. 1970-D.W.G., D.E.S. (ACAD 1825 coll. H.L.S. 13 Aug. 1966).

Inocybe neobrunnescens Grund & Stuntz var. **leucothelota** Grund & Stuntz *in* Mycologia 69:395. 1977.
On gravely soil under *Acer* sp. (maple) and *Tsuga* sp. (hemlock). Kings Co. 1977-D.W.G., D.E.S. (ACAD 11597 coll. H.L.S. 24 Aug. 1967, 11654, 11658, 11670, 11672).

Inocybe nodulosa Kauff. *in* North Am. Flora 10(4):239. 1924.
Under conifers. Colchester and Kings Co. 30 June 1931-A.H.S., L.E.W. (W-532, 532a) (ACAD 11602 coll. K.A.H. 18 July 1973, 11603).

Inocybe oblectabilis (Britz.) Sacc. *in* Syll. Fung. 11:54. 1895, f. **decemgibbosa** Kühner *in* Bull. Soc. Mycol. Fr. 49:116. 1933.
On soil under hardwoods. Annapolis Co. 16 Aug. 1976-D.W.G., D.E.S. (ACAD 11647 coll. K.A.H.).

Inocybe obscurobadia (Favre) Grund & Stuntz *in* Mycologia 69:407. 1977.
In woods of mixed hardwoods and conifers. Kings Co. 1977-D.W.G., D.E.S. (ACAD 10529 coll. D.W.G. 29 Aug. 1973).

Inocybe pallidicremea Grund & Stuntz *in* Mycologia 69:399. 1977.
In wooded areas, especially under conifers. Kings Co. 1977-D.W.G., D.E.S. (ACAD 11600 coll. D.W.G. 7 Sept. 1966, 11609).

Inocybe pallidipes Ell. & Ev. *in* J. Mycol. 5:24. 1889.
Inocybes eutheles Berk. & Br. var. *pallidipes* (Ell. & Ev.) Heim.
On bare soil. Colchester Co. 3 July 1931-A.H.S., L.E.W. (W-557).

Inocybe parcecoacta Grund & Stuntz *in* Mycologia 69:392. 1977.
Scattered in moss under *Picea* sp. (spruce). Kings Co. 1977-D.W.G., D.E.S. (ACAD 11598 coll. K.A.H. 21 July 1968).

Inocybe personata (Kühner) Kühner *in* Bull. Soc. Nat. Oyonnax, Mém. Hors Sér. 1:5. 1955.
On forest litter under hardwoods. Kings Co. Aug. 1976-D.W.G., D.E.S. (ACAD 11774).

Inocybe phaeoleuca Kühner *in* Bull. Soc. Nat. Oyonnax, Mém. Hors Sér. 1:5. 1955.

In moss or needles in mixed woods, often under *Picea* sp. (spruce). Kings Co. 1968-D.W.G., D.E.S. (ACAD 1845, 1847 coll. D.W.G. 7 Sept. 1966, 1873).

Inocybe praetervisa Quél. *in* Bresadola, Fungi Tridentini 1:35. 1883.
From Victoria Co. 31 Aug. 1957-K.A.H. (KM-4109 *in* DAOM).

Inocybe prominens Kauff. *in* North Am. Flora 10(4):239. 1924.
In grass under *Quercus rubra* L. (red oak) and on soil under conifers. Colchester and Kings Co. 3 July 1931-A.H.S., L.E.W. (W-583) (ACAD 10300, leg. K.A.H., 15 Aug. 1973).

Inocybe pudica Kühner *in* Ann. Sci. Franche-Comte 2:26. 1947.
On damp ground among moss in mixed woods. Kings Co. 16 Sept. 1968-D.W.G., D.E.S. (ACAD 13615, leg. D.W.G.).

Inocybe rimosoides Pk. *in* Bull. N.Y. State Mus. 150:32. 1911.
On ground in mixed woods. Kings Co. 14 Aug. 1976-D.W.G., D.E.S. (ACAD 11635, leg. K.A.H.).

Inocybe sambucella Atk. *in* Am. J. Bot. 5:215. 1918.
In mixed woods. Colchester Co. 10 July 1931-A.H.S., L.E.W. (W-599).

Inocybe scabra (O.F. Müller per Fr.) Kummer *in* Führ. in Pilzkd.:79. 1871, sensu J. Lange, M. Moser.
On the ground or in moss under (conifers) *Picea* sp. (spruce). Kings Co. 1970-D.W.G., D.E.S. (ACAD 1833 coll. D.W.G. 7 Sept. 1966, 1968).

Inocybe semifulva Grund & Stuntz *in* Mycologia 73:659. 1981.
In open areas near hardwoods or under conifers. Kings Co. 16 Aug. 1976-D.W.G., D.E.S. (ACAD 11651, 11652, leg. K.A.H.).

Inocybe sororia Kauff. *in* North Am. Flora 10:259. 1924.
From Kings Co. 1975-D.W.G., D.E.S. (ACAD 10566 coll. D.W.G. 11 Aug. 1966).

Inocybe stuntzii Grund *in* Mycologia 67:25-27. 1975.
In moss in woods of mixed conifers. Kings Co. 1975-D.W.G., D.E.S. (ACAD 10405 coll. K.A.H. 30 July 1973).

Inocybe subdestricta Kauff. *in* North Am. Flora 10:284. 1924.
Under conifers or hardwoods. Kings Co. 2 Sept. 1930-K.A.H. (KM-322 *in* DAOM, fide A.H.S.) (ACAD 1831 coll. H.L.S. 25 Aug. 1966).

Inocybe subexilis (Pk.) Sacc. *in* Syll. Fung. 5:785. 1887.
Agaricus subexilis Pk.
On ground under mixed woods. Kings Co. 18 Aug. 1976-D.W.G., D.E.S. (ACAD 11680 coll. H.S.).

Inocybe subochracea (Pk.) Pk. *in* Annu. Rep. N.Y. State Mus. 54:136. 1901.
On bare soil. Colchester and Kings Co. 9 July 1931-A.H.S., L.E.W. (W-596, 596a) (DAOM 39456 coll. K.A.H. 1 Sept. 1953).

Inocybe umbratica Quél. *in* Assoc. Fr. Av. Sci., C. R. 12e Sér.:500. 1884.
In woods of mixed conifers or hardwoods. Kings Co. 1977-D.W.G., D.E.S. (ACAD 11601 coll. H.L.S. 21 Aug. 1966).

Inocybe umbrina Bres. *in* Fungi Tridentini 1:50. 1884.
Under conifers. Kings Co. 1968-D.W.G., D.E.S. (ACAD 1816 coll. D.W.G. 14 Aug. 1966).

Inocybe vatricosa Fr. *in* Syst. Mycol. 1:259. 1821.
Rare. On moist soil. Colchester Co. 17 Aug. 1931-A.H.S., L.E.W. (W-766, 766a).

Inocybe ventricosa Atk. *in* Am. J. Bot. 5:217. 1918.
On soil in moss in hardwood or mixed woods. Kings Co. 26 Aug. 1976-D.W.G., D.E.S. (ACAD 11711, 11748).

Inocybe virgata Atk. *in* Am. J. Bot. 5:218. 1918.
On humus in mixed woods. Colchester Co. 4 Sept. 1931-A.H.S., L.E.W. (W-873).

Inocybe xanthomelas Bours. & Kühner *in* Bull. Soc. Mycol. Fr. 49:84. 1933.
On soil under *Tsuga* sp. (hemlock). Kings Co. 17 Aug. 1976-D.W.G., D.E.S. (ACAD 11673 coll. D.W.G., K.A.H.).

Inonotus cuticularis (Bull. ex Fr.) Karst. *in* Medd. Soc. Fauna Flora Fenn. (1880) 5:39. 1879.
Polyporus cuticularis (Bull.) Fr.
On *Betula lutea* Michx. f. (yellow birch). 1975-L.P.M., J.M.M.

Inonotus dryadeus (Pers. ex Fr.) Murr. *in* North Am. Flora 9:86. 1908.
Polyporus dryadeus (Pers.) Fr.
On dead trees. Halifax Co. 1886-J.S. (A.H.M.).

*** Inonotus dryophilus** (Berk.) Murr. *in* Bull. Torrey Bot. Club 31:597. 1904.
Polyporus dryophilus Berk.
On *Populus grandidentata* Michx. (largetooth aspen). Kings Co. 23 June 1942-R.M.L. (ACAD 2122 det. R.M.).

Inonotus obliquus (Pers.) Pilát *in* Atl. Champ. Eur. 3:572-573. 1942.
Phellinus obliquus (Pers. ex Fr.) Bond & Sing. (1941).
Polyporus obliquus (Pers.) Fr.
Poria obliquus (Pers. ex Fr.) Karst.
On *Betula lutea* Michx. f. (yellow birch), *B. papyrifera* Marsh. (white birch) and *Betula* sp. Kings Co. 1950-L.E.W. (O-F2277).

Inonotus radiatus (Sow. ex Fr.) Karst. *in* Rev. Mycol. 3, 9:19. 1881.
Polyporus radiatus Sow. ex Fr.
On dead wood of *Acer* sp. (maple), *Alnus* sp. (alder), *Betula lutea* Michx. f. (yellow birch), *B. papyrifera* Marsh. (white birch) and *Corylus* sp. (filbert). Colchester, Hants, Halifax and Pictou Co. 1881-J.S. (A.H.M.) (L.E.W.-1248a,b) (KM-116, 772, 773, 4254 *in* DAOM, K.A.H.).

★**Inonotus rheades** (Pers.) Bond. & Sing. var. **rheades** *in* Ann. Mycol. Berl. 39:56. 1941.
Polyporus dryophilus (Berk.) Murr. var. *vulpinus* (Fr.) Overh. (1933).
Polyporus rheades Pers.
On *Populus grandidentata* Michx. (largetooth aspen), *P. tremuloides* Michx. (trembling aspen) and *Populus* sp. Kings Co. 23 June 1942-R.M.L. (KM-2122 *in* DAOM, R.M.L.).

Inonotus subiculosus (Pk.) Erikss. & Strid. *in* Ann. Univ. Turk., Ser. A 2, 40 (Rep. Kevo Subartic Stn. 4):135. 1969.
Poria subiculosa (Pk.) Cke.
On *Abies balsamea* (L.) Mill. (balsam fir). 1975-L.P.M., J.M.M.

Irpex lacteus (Fr. per Fr.) Fr. *in* Elench. Fung.:145. 1828.
Irpex tulipiferae Schw.
Polyporus tulipiferae (Schw.) Overh.
On *Acer rubrum* L. (red maple), *Alnus* sp. (alder), *Betula* sp. (birch), *Fagus grandifolia* Ehrh. (beech), *Juglans cinerea* L. (butternut), *Malus pumila* Mill. (apple), *Populus* sp. (poplar) and *Prunus* sp. (cherry). General. 1908-A.H.M. (L.E.W.-103, 323, 1027) (O-F5493) (KM-66a-c, 2079, 4319 *in* DAOM, K.A.H.).

Isaria farinosa (Dicks.) Fr. *in* Syst. Mycol. 3:271. 1829.
Reported on pupae. Kings Co. 26 June 1933-K.A.H. (KM-1213, 1214 *in* DAOM).

Isariopsis bulbigera (Fckl.) Savile *in* Can. J. Bot. 35:201. 1957.
On *Sanguisorba canadensis* L. (Canadian burnet). Inverness Co. Aug. 1956-D.B.O.S. (Savile 3285 *in* DAOM).

Isariopsis episphaeria (Desm.) Höhn. *in* Sitzungsber. K. Acad. Wiss., Math.-Naturwiss. Kl, 125:117. 1916.
Isariopsis alborosella (Desm.) Sacc.

On *Cerastium vulgatum* L. (mouse-ear chickweed). Kings Co. 23 May 1932-J.F.H. det. I.L.C.

Ischnoderma resinosum *(Fr.) Karst. in* Medd. Soc. Fauna Flora Fenn. 5:38. 1879.
Polyporus resinosus Schrad. ex Fr.
On wood of *Malus pumila* Mill. (apple), *Picea* sp. (spruce) and *Tsuga canadensis* (L.) Carr. (hemlock). Cape Breton, Colchester, Halifax and Pictou Co. 1908-A.H.M. (L.E.W.-1468 coll. A.H.S.) (KM-15, 787, 795, 5234 *in* DAOM, K.A.H.) (O-F2200).

Isthmiella faullii (Darker) Darker *in* Can. J. Bot. 45:1420. 1967.
Bifusella faulii Darker.
On *Abies balsamea* (L.) Mill. (balsam fir). Guysborough and Lunenburg Co. 1932-G.D.D.

Itersonilia pastinacae Channon *in* Ann. Appl. Biol. 51:13-4. 1963.
On leaves and roots of *Pastinaca sativa* L. (parsnip). Kings Co. 8 Dec. 1961-K.A.H., C.O.G.

Junghuhnia collabens (Fr.) Ryv. *in* Persoonia 7:18. 1972.
Polyporus rixosa (Karst.) Karst.
Poria rixosa Karst.
On *Abies balsamea* (L.) Mill. (balsam fir). 1975-L.P.M., J.M.M.

Junghuhnia nitida (Pers. ex Fr.) Ryv. *in* Persoonia 7:18. 1972.
Polyporus attenuatus Pk.
Poria europa (Karst.) Cke.
On *Acer pensylvanicum* L. (striped maple), *Alnus* sp. (alder), *Betula lutea* Michx. f. (yellow birch), *Betula* sp. (birch), *Fagus grandifolia* Ehrh. (beech) and *Salix* sp. (willow). Annapolis, Colchester and Victoria Co. 30 July 1929-L.E.W. (W-188, 1270, 1119, 1232) (KM-4268 *in* DAOM, K.A.H. det R.M.).

Kabatia lonicerae (Harkn.) Höhn. *in* Ber. Dtsch. Bot. Ges. 37:106. 1919, var. **americana** (Ell. & Ev.) Conners *in* Can. J. Bot. 37:424. 1959.
Leptothyrium periclymeni (Desm.) Sacc. var. *americanum* Ell. & Ev.
On *Lonicera canadensis* Bartr. (fly-honeysuckle). Colchester Co. 1950-L.E.W. (W-332) (DAOM 1927 det. I.L.C, 26147).

Kabatiella apocrypta (Ell. & Ev.) v. Arx *in* Verh. K. Akad. Wet., Afd. Natuurkd. (2)51(3):59. 1957.
Gloeosporium apocryptum Ell. & Ev.
On *Acer pensylvanicum* L. (striped maple). *A. platanoides* L. (Norway maple), *A. rubrum* L. (red maple), *A. saccharinum* L. (silver maple), *A. saccharum* Marsh. (sugar maple) and *A. spicatum* Lam. (mountain maple). Kings Co. 23 Aug. 1951-D.W.C.

Kabatiella balsamea (Davis) v. Arx *in* Verh. K. Akad. Wet. Afd. Natuurkd. (2)51(3):62. 1957.
On *Abies balsamea* (L.) Mill. (balsam fir). 1961. (For. Insect Dis. Surv.:42. 1961).

Kabatiella caulivora (Kirchn.) Karak. *in* Not. Syst. Inst. Crypt. Hort. Bot. Petrop. 2:108. 1923.
Gloeosporium caulivorum Kirchn.
On stems of *Medicago sativa* L. (alfalfa) and *Trifolium pratense* L. (red clover). Digby and Kings Co. 11 June 1951-K.A.H., D.W.C.

★**Kabatiella zeae** Narita & Hiratsuka *in* Ann. Phytopathol. Soc. Jpn. 24:147-153. 1959.
Eyespot disease on leaves of *Zea mays* L. (corn). Hants Co. 9 Sept. 1977-R.W.D., C.O.G.

Karschia lignyota (Fr.) Sacc. *in* Syll. Fung. 8:779. 1889.
On fruiting bodies of *Peniophora* spp. Colchester Co. 3 Aug. 1929. L.E.W. (W-212, 1355).

Kavinia himantia (Schw.) Erickss. *in* Sven. Bot. Tidskr. 48:188. 1954.
Clavaria byssiseda Pers.
Clavaria himantia (Schw.) Fr.
On leaves of hardwood. Colchester Co. 18 Aug. 1931-L.E.W. (W-1346 coll. A.H.S., 1346a).

★**Khuskia oryzae** Hudson *in* Trans. Br. Mycol. Soc. 46:358. 1963.
Stat. conid. *Nigrospora oryzae* (Berk. & Br.) Petch.
On seed of *Zea mays* L. (corn). Kings Co. 7 Mar. 1973-R.W.D., C.L.L., C.O.G.

Kuehneola uredinis (Link) Arth. *in* North Am. Flora 7:186. 1912.
On *Rubus hispidus* L. (trailing blackberry) and *R. pubescens* Raf. (dewberry). Colchester, Kings, Lunenburg and Pictou Co. 1913-W.P.F.

Kuehneromyces mutabilis (Schaeff. ex Fr.) Sing. & Smith *in* Mycologia 38:505. 1946.
Pholiota mutabilis (Fr.) Quél.
On log of *Betula* sp. (birch). Colchester Co. 18 Aug. 1931-A.H.S., L.E.W. (W-783).

Kuehneromyces vernalis (Pk.) Sing. & Smith *in* Mycologia 38:514. 1946.
Pholiota marginella Pk.
On sawdust pile. Guysborough and Kings Co. 31 May 1932-K.A.H. (KM-433, 434 *in* DAOM, fide A.H.S.).

Laccaria amethystea (Bull. ex Merát) Murr. *in* North Am. Flora 10:1. 1914.
Clitocybe amethystea (Bull. ex Merát) Sacc.
Laccaria amethystina (Huds.) Cke.
Laccaria laccata var. *amethystina* ([Huds.] Cke.) Rae.
From Hants and Kings Co. 1950-L.E.W. (KM-205, 546 *in* DAOM, K.A.H. as *Clitocybe laccata* (Fr.) Quél. var. *amethystina* (Bolt.) Quél.).

Laccaria echinospora (Speg.) Sing. *in* Lilloa 22:176. 1951.
Clitocybe tortilis (Fr.) Gill.
Laccaria tortilis (Bolt. ex S.F. Gray) Cke.
In greenhouse, Kings Co. 1950-L.E.W. (coll. D.W.C., det. K.A.H., fide A.H.S.).

Laccaria laccata (Scop. ex Fr.) Cke *in* Illustr. Br. Fungi, tab. 139. 1884.
Clitocybe laccata (Scop. ex Fr.) Kummer.
Laccaria laccata (Scop. ex Fr.) Berk. & Br.
On mossy, moist or swampy areas. General. 1880-J.S. (A.H.M.) (KM-201-204, 980, 4120, 4121 *in* DAOM, K.A.H.) (L.E.W.-171, 504).

Laccaria ochropurpurea (Berk.) Pk. *in* Annu. Rep. N.Y. State Mus. 48:177. 1896.
Clitocybe ochropurpurea (Berk.) Sacc.
On grassy or wooded areas. Annapolis, Colchester, Hants and Kings Co. 1913-A.H.M. (KM-208, 270, 979, 2669, 4122 *in* DAOM, K.A.H.) (L.E.W.-652).

Laccaria ohiensis (Mont.) Sing. *in* Mycologia 38:688. 1946.
From Annapolis, Kings and Pictou Co. 1913-A.H.M. (KM-206 *in* DAOM, K.A.H. as *Clitocybe laccata* (Fr.) Quél. var. *striatula* Pk.).

Lachnella microspora (Kanouse) Seav. *in* North Am. Cup-Fungi (Inoperculates):267. 1951.
On decorticated scar areas of *Fagus* sp. (beech). Colchester Co. 27 June 1933-L.E.W. (W-1562 det. B.B.K.).

★**Lachnellula willkommii** (Hartig) Dennis *in* Persoonia 2:184. 1962.
Dasyscypha willkommii (Hartig) Rehm.
Trichoscyphella willkommii (Hartig) Nannf.
European canker on *Larix laricina* (Du Roi) Koch (larch). Cumberland Co. 24 Sept. 1980, Hants Co. 24 July 1981, coll. MacCall, conf. R.A.S.

Lactarius affinis Pk. var. **affinis** *in* N.Y. State Cab. Annu. Rep. 23:116. 1872,
Under *Abies* sp. (fir), *Picea* sp. (spruce) and mixed woods. Halifax and Kings

Co. 1890-J.S. (A.H.M.) (KM-325, 2670, 3847-3850 *in* DAOM, K.A.H.) (MICH 11855, K.A.H.).

Lactarius affinis Pk. var. **viridilactis** (Kauff.) Hesl. & Smith *in* North Am. Spec. of *Lactarius*:421. 1979.
Lactarius trivialis (Fr. ex Fr.) Fr. var. *viridilactis* Kauff.
Under *Tsuga* sp. (hemlock). Colchester Co. 13 July 1931-A.H.S., L.E.W. (W-611, 611a) (MICH 11924, K.A.H.).

★**Lactarius allardii** Coker *in* J. Elisha Mitchell Sci. Soc. 34:12. 1918.
From Halifax Co. 9 Sept. 1958-K.A.H. (KM-3852 *in* DAOM).

★**Lactarius alpinus** Pk. *in* Annu. Rep. N.Y. State Mus. 27:96. 1875, var. **alpinus.**
From Victoria Co. 3 Sept. 1956-K.A.H. (KM-3851 *in* DAOM).

Lactarius aquifluus Pk. *in* Annu. Rep. N.Y. State Mus. 28:50. 1876.
On soil and in sphagnum bogs. Colchester, Hants and Kings Co. 13 Aug. 1931-A.H.S., L.E.W. (W-746) (KM-335, 831, 841, 2676, 2677, 5306 *in* DAOM, K.A.H.) (MICH 8018, 11878, K.A.H.).

Lactarius argillaceifolius Hesl. & Smith var. **argillaceifolius** *in* North Am. Spec. of *Lactarius*:366. 1979.
From Kings Co. 6 Aug. 1972-K.A.H. (MICH 11676, 11706).

Lactarius aspideoides Burl. *in* Bull. Torrey Bot. Club 34:87. 1907.
Under conifers. Colchester Co. 18 Aug. 1931-A.H.S., L.E.W. (W-790).

Lactarius aurantiacus (Fr.) S.F. Gray *in* Nat. Arr. Br. Pl. 1:624. 1821.
Agaricus aurantiacus Fr.
From Annapolis Co. 1913-A.H.M.

Lactarius camphoratus (Fr.) Fr. *in* Epicr. Syst. Mycol.:346. 1838.
In mixed woods. Colchester and Kings Co. 16 Aug. 1929-A.H.S., L.E.W. (W-241, 619) (KM-326, 838, 975, 2671 *in* DAOM, K.A.H.) (MICH 11561, K.A.H.).

Lactarius carbonicola A.H. Smith *in* Brittonia 12:342. 1960.
On mossy soil and on dried-up, woodland pools. Kings Co. 5 Aug. 1972-K.A.H. (MICH 7797, 7826, 11698, 11699).

Lactarius chelidonium Pk. *in* Annu. Rep. N.Y. State Mus. 24:74. 1872, var. **chelidonium.**
Under *Picea* sp. (spruce). Colchester and Pictou Co. 1913-A.H.M. (L.E.W.-767).

Lactarius chrysorheus Fr. *in* Epicr. Syst. Mycol.:342. 1838.
From Kings Co. 1928-K.A.H. (KM-327, 540, 827 *in* DAOM, fide A.H.S.) (TENN 30380, Storrie).

Lactarius cinereus Pk. var. **cinereus** *in* Annu. Rep. N.Y. State Mus. 24:73. 1872.
On wood of *Fagus* sp. (beech) and on ground. Cape Breton, Cumberland and Kings Co. 1928-K.A.H. (KM-238, 836, 977 fide A.H.S., 3856, 5300, 5301 *in* DAOM).

Lactarius colorascens Pk. *in* Bull. N.Y. State Mus. 94:33. 1905.
Under *Picea* sp. (spruce). Colchester Co. 13 Aug. 1931-A.H.S., L.E.W. (W-745) (KM-2672, 2673, 3854, 3855 *in* DAOM, K.A.H.).

★**Lactarius corrugis** Pk. *in* Annu. Rep. N.Y. State Mus. 32:31. 1879 (1880).
From Halifax Co. 9 Sept. 1958-K.A.H. (KM-3859 *in* DAOM).

Lactarius deceptivus Pk. *in* Annu. Rep. N.Y. State Mus. 38:125. 1885.
In mixed woods. Annapolis, Kings and Queens Co. 1913-A.H.M. (KM-329, 330, 837, 974, fide A.H.S., 5302 *in* DAOM, K.A.H.) (DAOM 39260, K.A.H.) (MICH 11614, 11675, K.A.H.).

Lactarius deliciosus (Fr.) S.F. Gray var. **deliciosus** *in* Nat. Arr. Br. Pl. 1:624. 1821.
In moist woods. Cape Breton, Colchester and Kings Co. 1928-K.A.H. (KM-331, 834, 2674, 3862, 5303 *in* DAOM) (L.E.W.-157, 563).

Lactarius duplicatus A.H. Smith *in* Brittonia 12:329. 1960.
Scattered on soil in mixed woods and sphagnum. Kings Co. 26 Aug. 1968-K.A.H. (MICH 7783, 7859).

Lactarius fuliginosus (Fr. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:348. 1838.
Agaricus fuliginosus Fr.
Under conifers. Annapolis, Colchester, Cumberland and Kings Co. 18 Aug. 1931-A.H.S., L.E.W. (W-775) (KM-332, 844, 2675, 5304 *in* DAOM, K.A.H.).

★**Lactarius fumosus** Pk. *in* Annu. Rep. N.Y. State Mus. 24:74. 1872.
From Halifax Co. 9 Sept. 1958-K.A.H. (KM-3865 *in* DAOM).

Lactarius gerardii Pk. var. **gerardii** *in* Bull. Buffalo Soc. Nat. Sci. 1:57. 1873.
In wooded ravine. Kings Co. 26 Aug. 1952-K.A.H. (KM-1591, 3866 *in* DAOM) (MICH 11660, 11712, 12353).

Lactarius glyciosmus (Fr.) Fr. *in* Epicr. Syst. Mycol.:348. 1838.
In mixed woods. Colchester, Halifax and Kings Co. 1908-A.H.M. (L.E.W.-850) (KM-333 *in* DAOM, K.A.H.) (MICH 11874, 11954, 12072, K.A.H.).

Lactarius griseus Pk. *in* N.Y. State Cab. Annu. Rep. 23:120. 1872.
Under conifers. Colchester, Digby and Kings Co. 13 July 1931-A.H.S., L.E.W. (W-615) (KM-334, 832, 833 *in* DAOM, K.A.H.) (MICH 7868, 11935, 12041, K.A.H.).

Lactarius helvus (Fr.) Fr. *in* Epicr. Syst. Mycol.:347. 1838.
See *Lactarius aquifluus* Pk. (In Groves' sense is this species fide S.A. Redhead).

Lactarius hepaticus Plowr. *in* Boudier, E. Icon. Mycol. 4:28. 1905.
Lactarius nitidus Burl.
On wet moss along streams or swampy areas. Kings Co. 16 July 1972-K.A.H. (MICH 11593, 11594, 11723, 11751).

Lactarius hibbardae Pk. var. **hibbardae** *in* J. Mycol. 14:2. 1908.
From Annapolis, Cape Breton and Kings Co. 29 Aug. 1953-K.A.H. (KM-2678-2680, 3868, 5307, 5308 *in* DAOM) (MICH 7885, 12041a, 12091).

Lactarius hygrophoroides Berk. & Curt. var. **hygrophoroides** *in* Ann. Mag. Nat. Hist., Sér. 3, 4:293. 1859.
Under *Acer* sp. (maple) and *Fagus* sp. (beech). Halifax, Kings and Lunenburg Co. 30 July 1931-A.H.S., L.E.W. (W-716) (KM-336, 972, 2681 *in* DAOM, K.A.H.).

Lactarius hygrophoroides Berk. & Curt. var. **rugatus** Hesl. & Smith *in* North Am. Spec. of *Lactarius*:175. 1979.
Lactarius rugatus Kühner & Romagn.
On wet soil under hardwoods. Kings Co. 2 Aug. 1972-K.A.H. (MICH 11668).

Lactarius hysginus (Fr. ex Fr.) Fr. var. **hysginus** *in* Epicr. Syst. Mycol.:337. 1838.
From Annapolis and Kings Co. 1913-A.H.M. (KM-840, 3870 *in* DAOM, K.A.H., fide A.H.S.).

Lactarius insulsus (Fr.) Fr. var. **insulsus** *in* Epicr. Syst. Mycol.:336. 1838.
From Kings Co. 28 July 1938-K.A.H. (KM-830, 3873 *in* DAOM) (a doubtful species fide Hesler & Smith, 1979).

Lactarius lignyotus (Fr. ex Fr.) Fr. var. **lignyotus** *in* Monogr. Hymen. Suec. 2:177. 1863.
Under conifers. Colchester, Halifax, Kings and Lunenburg Co. 1888-J.S. (A.H.M.) (KM-337, 846, 3871, 3872 *in* DAOM, K.A.H.) (MICH 8391, 11716, K.A.H.) (L.E.W.-613).

Lactarius lignyotus (Fr. ex Fr.) Fr. var. **canadensis** Smith & Hesl. *in* Brittonia 14:398. 1962.
On sphagnum under *Picea* sp. (spruce) in bogs. Guysborough Co. 19 Sept. 1968-K.A.H. (MICH 7981).

Lactarius luteolus Pk. *in* Bull. Torrey Bot. Club 23:412. 1896.
Along roads and under hardwoods. Halifax Co. 30 July 1931-A.H.S., L.E.W. (W-243).

Lactarius mucidus Burl. var. **mucidus** *in* Mem. Torrey Bot. Club 14:56. 1908.
Under *Tsuga* sp. (hemlock). Cumberland and Kings Co. 6 Sept. 1931-K.A.H. (KM-338, 339, 976, 2682, 2683, 5310 *in* DAOM).

Lactarius mucidus Burl. var. **mucidioides** Hesl. & Smith *in* North Am. Spec. of *Lactarius*:362. 1979.
From Kings Co. 24 Aug. 1972-K.A.H. (MICH 11823).

Lactarius oculatus (Pk.) Burl. *in* Bull Torrey. Bot. Club. 34:89. 1907.
In sphagnum bogs. Kings Co. 27 July 1938-K.A.H. (KM-828, 829 *in* DAOM, fide A.H.S.).

Lactarius pallidus (Pers. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:343. 1838.
Reported from Halifax Co. 1913-A.H.M.

Lactarius piperatus (Scop. ex Fr.) S.F. Gray var. **piperatus** *in* Nat. Arr. Br. Pl. 1:623. 1821.
On humus in mixed woods. Colchester, Halifax, Kings, Lunenburg and Pictou Co. 1886-J.S. (KM-340, 2684 *in* DAOM, K.A.H.).

★**Lactarius psammicola** A.H. Smith f. **psammicola** *in* Pap. Mich. Acad. Sci. Arts Lett. 26:62. 1941.
From Antigonish, Cumberland and Guysborough Co. 3 Sept. 1957-K.A.H. (KM-3874, 3875, 5136 *in* DAOM).

Lactarius pseudoflexuosus Hesl. & Smith *in* North Am. Spec. of *Lactarius*:383. 1979.
From Kings Co. 10 Aug. 1972-K.A.H. (MICH 7798, 11735, 11832, 11923).

Lactarius pubescens Fr. var. **pubescens** sensu lato *in* Epicr. Syst. Mycol.:335. 1838.
Under *Tsuga* sp. (hemlock). Colchester Co. 12 Aug. 1931-A.H.S., L.E.W. (W-737).

Lactarius pyrogalus (Fr.) Fr. *in* Epicr. Syst. Mycol.:339. 1838.
From Kings and Pictou Counties. 1908-A.H.M. (KM-341, 826, 843 *in* DAOM, K.A.H.) (MICH 11709, 11875, K.A.H.).

Lactarius quietus Fr. *in* Epicr. Syst. Mycol.:343. 1838.
From woods. Halifax Co. 1908-A.H.M. (a doubtful determination).

Lactarius repraesentaneus Britz. *in* Hymen. Sübd. 4.136. 1885 (sensu Neuhoff *in* Die Milchlinge:111. 1956).
Under conifers. Colchester Co. 18 Aug. 1931-A.H.S., L.E.W. (W-789, 789a) (MICH Williams, Sept. 1964).

Lactarius resimus Fr. var. **resimus** *in* Epicr. Syst. Mycol.:336. 1838.
Under conifers. Annapolis, Antigonish and Colchester Co. 1908-A.H.M. (L.E.W.-877).

Lactarius resimus Fr. var. **regalis** Pk. *in* Annu. Rep. N.Y. State Mus. 38:118. 1885.
Scattered under hardwoods. Kings Co. 31 Aug. 1972-K.A.H. (MICH 8358, 11866).

Lactarius rimosellus Pk. *in* Bull. N.Y. State Mus. 105:37. 1906.
On mossy ground. Kings Co. 15 July 1931-K.A.H. (KM-342 *in* DAOM, fide A.H.S.).

Lactarius rufus (Fr.) Fr. var. **rufus** *in* Epicr. Syst. Mycol.:347. 1838.
Lactarius boughtoni Pk.
Lactarius rufus var. *boughtoni* (Pk.) Kauff.
From Cape Breton, Cumberland and Guysborough Co. 5 Sept. 1957-K.A.H. (KM-3895, 5313, 5314 *in* DAOM) (MICH 8167, K.A.H., variant Smith 33-1009).

Lactarius sanguifluus Paul. ex. Fr. *in* Epicr. Syst. Mycol.:341. 1838.
From Kings Co. 22 July 1931-K.A.H. (KM-343 *in* DAOM) (not recognized in North America by Hesler & Smith, 1979).

Lactarius scrobiculatus (Scop. ex Fr.) Fr. var. **scrobiculatus** *in* Epicr. Syst. Mycol.: 334. 1838.
Under *Tsuga* sp. (hemlock) or other conifers. Annapolis, Colchester and Kings Co. 1913-A.H.M. (KM-345, 845 *in* DAOM, K.A.H.) (L.E.W.-735, 735a) (Its presence in North America needs critical documentation, fide Hesler & Smith, 1979).

Lactarius scrobiculatus (Scop. ex Fr.) Fr. var. **canadensis** (A.H. Smith) Hesler & Smith *in* North Am. Spec. of *Lactarius*:297. 1979.
Lactarius payettensis (A.H. Smith) var. *canadensis* Smith.
In conifer woods. Kings Co. 21 July, 1972-K.A.H. (MICH 11621).

Lactarius sordidus Pk. *in* N.Y. State Cab. Rep. 23:119. 1872.
Lactarius necator (Pers. ex Fr.) Karst.
Lactarius plumbeus Fr.
Lactarius turpis (Weinm.) Fr.
Under hardwoods. Colchester, Cumberland, Digby, Halifax and Kings Co. 1908-A.H.M. (KM-352, 1599, 3880-3883 *in* DAOM, K.A.H.) (L.E.W.-784) (MICH 8054, 8187, 8242, 11956, 11965, 11999, K.A.H.).

Lactarius subdulcis (Fr.) S.F. Gray *in* Nat. Arr. Br. Pl. 1:625. 1821.
Reported on humus in mixed woods. Annapolis, Colchester, Kings, Pictou and Shelburne Co. 1908-A.H.M. (KM-346, 347, 545, 887 *in* DAOM, K.A.H.) (L.E.W.-776). In Groves sense this represents a complex of species such as *L. carbonicola* Smith and *L. thejogalus* Fr.:the true *L. subdulcis* is not definitely known from North America, fide S.A. Redhead.

Lactarius subvellereus Pk. *in* Bull. Torrey Bot. Club 25:369. 1898, var. **subdistans** Hesl. & Smith *in* North Am. Spec. of *Lactarius*:203. 1979.
From Kings Co. 3 Aug. 1972-K.A.H. (MICH 11673, 12140, 12257).

Lactarius thejogalus (Fr.) S.F. Gray *in* Nat. Arr. Br. Pl. 1:624. 1821.
In mixed woods. Annapolis, Colchester and Kings Co. 1913-A.H.M. (KM-348 *in* DAOM, K.A.H.) (MICH 11724, K.A.H.).

Lactarius thyinos A.H. Smith *in* Brittonia 12:135. 1960.
From Kings Co. 5 Aug. 1972-K.A.H. (MICH 11700, 11766, 12007).

Lactarius torminosus (Schaeff. ex Fr.) S.F. Gray var. **torminosus** *in* Nat. Arr. Br. Pl.: 623. 1821.
Under conifers. Kings and Queens Co. 1908-A.H.M. (L.E.W.-777) (KM-349, 541, 3857, 3858, 3876, 3877, 5147, 5315, 5318 *in* DAOM, K.A.H.) (MICH 11788, 11815, K.A.H.).

Lactarius trivialis (Fr. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:337. 1838.
On humus under hardwoods. Colchester, Hants and Kings Co. 1928-K.A.H. (KM-350, 351, 839, 842, 978, 2685 *in* DAOM) (L.E.W.-577).

Lactarius uvidus (Fr. ex Fr.) Fr. var. **uvidus** *in* Epicr. Syst. Mycol.:338. 1838.
Under conifers. Colchester and Pictou Co. 1908-A.H.M. (KM-2686 *in* DAOM, K.A.H.) (L.E.W.-871).

Lactarius uvidus (Fr. ex Fr.) Fr. var. **acystidiosus** Hesl. & Smith *in* North Am. Spec. of *Lactarius*:341. 1979.
Under conifers. Kings Co. 29 Aug. 1972-K.A.H. (MICH 11851 type).

Lactarius vellereus (Fr.) Fr. var. **vellereus** *in* Epicr. Syst. Mycol.:340. 1838.
Under conifers and hardwoods. Colchester, Halifax, Kings, Lunenburg, Pictou and Queens Co. 1908-A.H.M. (KM-353, 354, 973, 5320 *in* DAOM, K.A.H.) (MICH. 11613, 11677, 11690, 11714, K.A.H.) (L.E.W.-718).

Lactarius vietus (Fr.) Fr. *in* Epicr. Syst. Mycol.:344. 1838.
Lactarius trivialis (Fr. ex Fr.) Fr. var. *gracilis* Pk.
In coniferous woods where *Betula* sp. (birch) occurs. Annapolis Co. 8 Sept. 1972-K.A.H. (MICH 7886, 11850, 11873, 11960, 12071, 12098).

Lactarius vinaceorufescens A.H. Smith *in* Brittonia 12:334. 1960.
Under mixed *Pinus* sp. (pine) and *Quercus* sp. (oak). Kings Co. 10 Aug. 1972-K.A.H. (MICH 11734, 11752, 11822, 11966).

Lactarius violascens Fr. *in* Syst. Mycol.:342. 1838.
From Guysborough Co. 9 Aug. 1931-K.A.H. (KM-344 *in* DAOM) See Hesler & Smith—North Am. Spec. of *Lactarius*:333. 1979 for a discussion of this species.

Lactarius volemus (Fr.) Fr. var. **volemus** *in* Epicr. Syst. Mycol.:334. 1838.
On soil in deciduous woods. Kings and Pictou Co. 1913-A.H.M. (KM-355, 356 *in* DAOM, K.A.H. fide A.H.S.) (MICH 12139, 12271, 12350 K.A.H.).

Laetiporus sulphureus (Fr.) Murr. *in* Bull. Torrey Bot. Club 31:607. 1904.
Grifola sulphurea (Bull. ex Fr.) Pilát.
Laetiporus sulphureus (Bull. ex Fr.) Bond. & Sing.
Polyporus sulphureus Bull. ex Fr.
On *Betula lutea* Michx. f. (yellow birch), *Betula* sp., *Prunus* sp. (stone fruit), *Quercus rubra* L. (red oak) and *Quercus* sp. Antigonish, Colchester, Halifax, Kings and Pictou Co. 1908-A.H.M. (KM-119, 119a, 776, 777 *in* DAOM, K.A.H.) (L.E.W.-187) (O-F1392).

Lamproderma arcyrionema Rostaf. *in* Monogr. Mycetozoa:208. 1874.
On *Abies balsamea* (L.) Mill. (balsam fir). Pictou Co. 1906-C.L.M.

Lamprospora crec'hqueraultii (Crouan) Boud. *in* Hist. Class. Discom. Eur.:69. 1907.
On clayey soil. Kings Co. 1 July 1932-K.A.H. (KM-1154 *in* DAOM).

Lamprospora polytrichina (Rehm) Seav. *in* Mycologia 6:23. 1914.
On bare soil and among mosses. Colchester Co. 1 July 1929-L.E.W. (W-8, 367).

Lamprospora trachycarpa (Curr.) Seav. *in* Mycologia 6:19. 1914.
On burned ground. Kings Co. 31 Aug. 1933-K.A.H. (KM-1155 *in* DAOM).

Lamprospora wisconsinensis Seav. *in* North Am. Cup-Fungi (Operculates):69. 1928.
On soil. Kings Co. 18 May 1934-K.A.H. (KM-1102 *in* DAOM).

Lasiobolus equinus (Müll.) Karst. *in* Acta Soc. Fauna Flora Fenn. 2:122. 1885.
On rabbit dung. Colchester Co. 3 July 1931-L.E.W. (W-362).

Lasiosphaeria hirsuta (Fr.) Ces. & de Not. *in* Comm. Soc. Critt. Ital. 1:229. 1863.
On decayed log. Colchester Co. 10 Aug. 1931-L.E.W. (W-1253).

Laxitextum bicolor (Pers.) Fr. *in* Syst. Mycol. 1:438. 1821 (as *Thelephora* Lentz *in* Agric. Monogr. U.S. Dep. Agric. 24:19. 1955).
Stereum bicolor (Pers.) Fr.
On *Aesculus hippocastanum* L. (horse chestnut) and *Populus* sp. (poplar). 1975-L.P.M., J.M.M.

Leccinum albellum (Pk.) Sing. f. **albellum** *in* Mycologia 37:799. 1945.
Boletus albellus Pk.
In wooded ravine. Kings Co. 1 Sept. 1951-K.A.H. (KM-1459 *in* DAOM).

Leccinum atrostipitatum Smith, Thiers & Watling *in* Mich. Bot. 5:155. 1966.
In mixed woods. Kings Co. 1976-D.W.G., K.A.H. (ACAD 11493).

Leccinum aurantiacum (Bull. ex St. -Am.) S.F. Gray *in* Nat. Arr. Br. Pl. 1:646. 1821, emended Snell, Mycologia 34:406. 1942.
Boletus versipellis Fr.
Under *Abies* sp. (fir) and *Picea* sp. (spruce). Colchester, Kings and Pictou Co. 1913-A.H.M. (KM-584, 733, 1819, 2400, 2401 *in* DAOM, K.A.H.) (L.E.W.-552).

Leccinum flavostipitatum Dick & Snell *in* Mycologia 57:456. 1965.
On *Picea glauca* (Moench) Voss (white spruce). 1965. (*in* WHS Bolete Herbarium no 2534).

Leccinum holopus (Rostk.) Watling var. **holopus** *in* Trans. Br. Mycol. Soc. 43: 692. 1960.

Boletus niveus Fr.

Boletus scaber Fr. var. *niveus* Pk.

In mixed woods. Colchester, Guysborough and Kings Co. 24 July, 1931-A.H.S., L.E.W. (W-695) (ACAD 11455, D.W.G., K.A.H.) (KM-3713, 5355 *in* DAOM, K.A.H.).

Leccinum holopus (Rostk.) Watling var. **americanum** Smith & Thiers *in* Boletes of Mich.:183. 1971.

From Queens Co. 23 Sept. 1962-K.A.H. (KM-5362 *in* DAOM).

Leccinum scabrum (Bull. ex Fr.) S.F. Gray *in* Nat. Arr. Br. Pl. 1:647. 1821, f. **scabrum.**

Boletus scaber Bull. ex Fr.

In mixed woods. Annapolis, Kings, Pictou, Queens and Shelburne Co. 1908-A.H.M. (KM-575, 576, 1776, 3808-3819, 5361 *in* DAOM, K.A.H.) (ACAD 11463, D.W.G., K.A.H.).

Leccinum subleucophaeum Dick & Snell *in* Mycologia 52:453. 1960.

In mixed woods near *Betula* sp. (birch). Kings Co. 1976-D.W.G., K.A.H. (ACAD 11456).

Lentaria mucida (Fr.) Corner *in* Monogr. of *Clavaria* and Allied Genera:442. 1950.

Clavaria mucida (Pers.) Fr.

On wet decayed wood. General. 1913-A.H.M. (KM-627 *in* DAOM, K.A.H.) (L.E.W.-1203, 1203a) (ACAD 627 coll. K.A.H.) (B.J.M.-158 *in* ACAD).

Lentinellus cochleatus (Pers. ex Fr.) Karst. *in* Hattsvampar 1:18. 1879.

Lentinus cochleatus (Pers. ex Fr.) Fr.

On *Fagus grandifolia* Ehrh. (beech) and Quercus sp. (oak). Colchester, Halifax and Kings Co. 1890-J.S. (A.H.M.) (KM-364, 907 *in* DAOM, K.A.H.) (L.E.W.-822).

Lentinellus ursinus (Fr.) Kühner *in* Botaniste 17:100. 1926.

Agaricus ursinus Fr.

Lentinus ursinus Fr.

At base of *Picea* sp. (spruce) and on old log. Kings and Richmond Co. 31 Oct. 1932-K.A.H. (KM-369, 1814, 5391 *in* DAOM as *Lentinus ursinus*).

Lentinellus vulpinus (Fr.) Kühner & Maire *in* Bull. Soc. Mycol. Fr. 50:16. 1934.

Agaricus vulpinus Sow. ex Fr.

Lentinus vulpinus Fr.

On *Populus nigra* var. *italica* Muench. (Lombardy poplar). Annapolis, Hants and Kings Co. 1908-A.H.M. (KM-367, 368, 1422, 5392 *in* DAOM, K.A.H.).

Lentinus lepideus Fr. *in* Syst. Orbis Veg. 1:78. 1825.

On coniferous and deciduous wood. Halifax, Kings and Pictou Co. 1908-A.H.M. (KM-365, 366 *in* DAOM, K.A.H.).

★ **Lentinus spretus** Pk. *in* Bull. N.Y. State Mus. 105:24. 1906.

On coniferous wood. Kings Co. 16 Aug. 1953-K.A.H. (KM-2727 *in* DAOM, det. J.W.G.).

★ **Lentinus umbilicatus** Pk. *in* Annu. Rep. N.Y. State Mus. 28:51. 1876.

On soil and wood. Cape Breton Co. 6 Sept. 1963-K.A.H. (KM-5390 *in* DAOM).

Lenzites abietina (Bull.) Fr. *in* Epicr. Syst. Mycol.:407. 1838.

See *Gloeophyllum abietinum* (Bull. ex Fr.) Karst.

Lenzites betulina (L. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:405. 1838.

On *Acer rubrum* L. (red maple), *Betula* sp. (birch), *Corylus* sp. (hazelnut), *Fagus grandifolia* Ehrh. (beech), *Malus* sp. (apple), *Populus* sp. (poplar), *Quercus* sp. (oak) and *Salix* sp. (willow). General. 1881-J.S. (A.H.M.) (O-F2215, 5888, 7205) (L.E.W.-5, 1093) (KM-4233 *in* DAOM, K.A.H.).

Lenzites saepiaria (Wulf. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:407. 1838.
See *Gloeophyllum hirsutum* Schaeff. ex Murr.

Leocarpus fragilis (Dicks.) Rostaf. *in* Monogr. Mycetozoa:132. 1874.
On decaying wood, moss and leaves. Colchester and Pictou Co. 1906-C.L.M. (L.E.W.-1068).

Leotia atrovirens Pers. ex Fr. *in* Syst. Mycol. 2:30. 1822.
In swampy area of wooded ravine. Kings Co. 26 Aug. 1933-K.A.H. (KM-1017 *in* DAOM) (ACAD 1017, 1017b,c).

Leotia chlorocephala Schw. ex Durand *in* Ann. Mycol. 6:450. 1908.
From Kings Co. 15 Aug. 1935-K.A.H. (KM-1038, 1039 *in* DAOM).

Leotia lubrica (Scop.) Pers. var. **lubrica** *in* Rommer's Neues Mag. Bot. 1:97. 1794.
On soil and duff. General. 1882-J.S. (A.H.M.) (L.E.W.-440a, leg. A.R.P.-6032) (ACAD 1018a,b,c, K.A.H.).

Leotia lubrica (Scop.) Pers. f. **lloydii** (Rehm) Durand *in* Ann. Mycol. 6:447. 1908.
Among moss under conifers. Colchester and Kings Co. 10 Sept. 1927-L.E.W. (W-440) (KM-1034, 1542 *in* DAOM, K.A.H.).

Leotia lubrica (Scop.) Pers. f. **stevensoni** (Berk. & Br.) Massee *in* Ann. Bot. 11:289. 1897.
In wooded ravine. Kings Co. 28 Aug. 1932-K.A.H. (KM-1019, 1037, 1541 *in* DAOM).

Leotia viscosa Fr. *in* Syst. Mycol. 2:30. 1821.
Leotia stipitata (Bosc) Schroet.
On humus among moss. Colchester and Kings Co. 10 Sept. 1927-L.E.W. (W-441, 441a as *L. stipitata* leg. A.H.S.) (KM-1020, 1040, 1041 *in* DAOM, K.A.H.) (ACAD 1020).

★**Lepiota acutesquamosa** (Weinm.) Kummer *in* Führ. in Pilzkd.:26. 1882.
On rotten wood. Kings Co. 20 Oct. 1952-K.A.H. (KM-1768, 1771 *in* DAOM).

Lepiota americana Pk. *in* N.Y. State Cab. Rep. 23:71. 1872.
See *Leucocoprinus americana* (Pk.) Redhead.

Lepiota clypeolaria (Bull. ex Fr.) Kummer *in* Führ. in Pilzkd.:27. 1882.
Under *Picea* sp. (spruce). Colchester Co. 17 Aug. 1931-A.H.S., L.E.W. (W-720, 720a).

Lepiota cristata (Bolt. ex Fr.) Kummer *in* Führ. in Pilzkd.:27. 1882.
On humus. Annapolis, Colchester, Kings and Lunenburg Co. 1913-A.H.M. (KM-370, 2690, 4002, 4015 *in* DAOM, K.A.H.) (L.E.W.-803).

Lepiota fuscosquamea Pk. *in* Annu. Rep. N.Y. State Mus. 26:50. 1874.
Under *Picea* sp. (spruce). Colchester and Kings Co. 19 Aug. 1931-A.H.S., L.E.W. (W-792, 792a) (KM-904 *in* DAOM, K.A.H. as *L. felina* Fr. fide A.H.S.).

Lepiota leucothites (Vitt.) Orton *in* Trans. Br. Mycol. Soc. 43:117. 1960.
Agaricus leucothites Vitt.
Lepiota naucina (Fr.) Kummer.
Lepiota naucinoides Pk.
Leucoagaricus naucinus (Fr.) Sing. (1951).
In orchards and meadows. Colchester and Kings Co. 11 Sept. 1931-A.S.H., L.E.W. (W-899) (KM-372 *in* DAOM, K.A.H.).

Lepista nuda (Bull. ex Fr.) Cke *in* Handbook 1:192. 1871.
Lepista personata (Fr. ex Fr.) Cke.
Tricholoma nudum (Bull. ex Fr.) Kummer.
Tricholoma personatum (Fr. ex Fr.) Kummer.
From woods and orchards. Halifax and Kings Co. 1880-J.S. (KM-512, 955, 1479, 1789, 2744 *in* DAOM, K.A.H.).

Leptoglossum tremulum (Schaeff. ex Fr.) Sing. *in* Sydowia (1961) 15:52. 1962.
Agaricus tremulus Schaeff. ex Fr.
Leptotus tremulus (Schaeff. ex Fr.) Sing. (1951).
Pleurotus tremulus (Schaeff. ex Fr.) Quél.
On moss *(Dicranum)*. Colchester Co. 30 June 1931-A.H.S., L.E.W. (W-536).

Leptomelanconium tremuloides (Ell. & Ev.) v. Arx *in* Verh. K. Akad. Wet. Amsterdam Afd. Natuurkd. 51:142. 1957.
See *Discosporium tremuloides* (Ell. & Ev.) Sutton.

Leptomitus lacteus (Roth) C. Ag. *in* Syst. Alg.:47. 1824.
From Cape Breton Co. 1913-C.L.M.

Leptonia asprella (Fr.) Quél. *in* Champ. Jura et Vosges:89. 1872.
Rhodophyllus asprellus (Fr.) Quél.
Under *Fagus* sp. (beech). Colchester Co. 17 July 1931-A.H.S., L.E.W. (W-648).

Leptonia formosa (Fr.) Quél. *in* Champ. Jura et Vosges:121. 1872.
Leptonia formosa (Fr.) Gill.
Rhodophyllus formosus (Fr.) Quél.
Tricholomopsis formosa (Murr.) Sing. (1975).
On humus in mixed woods. Colchester and Kings Co. 17 July 1931-A.H.S., L.E.W. (W-649) (KM-374 *in* DAOM, K.A.H.).

Leptonia griseorubella (Lasch) Orton *in* Trans. Br. Mycol. Soc.:43.177. 1960.
Agaricus griseorubellus Lasch.
Eccilia carneo-grisea Berk. & Br.
From Halifax Co. 1908-A.H.M.

Leptonia lampropoda (Fr.) Quél. *in* Champ. Jura et Vosges:88. 1872.
Rhodophyllus lampropoda (Fr.) Quél.
Under hardwoods and in pastures. Colchester and Halifax Co. 1908-A.H.M. (KM-375 *in* DAOM, K.A.H.) (L.E.W.-810).

Leptonia serrulata (Pers. ex Fr.) Kummer *in* Führ. in Pilzkd.:68. 1882.
Eccilia atrides (Lasch) Kummer.
Rhodophyllus serrulatus (Pers. ex Fr.) Quél.
From Colchester and Kings Co. 20 July 1931-A.H.S., L.E.W. (W-680) (KM-265, 376 *in* DAOM, K.A.H.).

Leptosphaeria albopunctata (Westend.) Sacc. *in* Syll. Fung. 2:72. 1883.
On intertidal wood. Halifax Co. 1970-G.A.N.

Leptosphaeria anisomeres Wehm. *in* Can. J. Res., C, 20:582. 1942.
On *Agropyron repens* (L.) Beauv. (couch or quack grass). Colchester Co. 22 June 1933-L.E.W. (W-83, 1683).

Leptosphaeria avenaria Weber f. sp. **avenaria** *in* Phytopathology 12:450. 1922.
Stat. conid. *Septoria avenae* Frank. f. sp. *avenae*.
On *Avena sativa* L. (oat). General. 1939-I.L.C.

Leptosphaeria avenaria Weber f. sp. **triticea** T. Johnson *in* Can. J. Res. 25(6):262. 1947.
Stat. conid. *Septoria avenae* Frank f. sp. *triticea* T. Johnson.
On *Triticum aestivum* L. (wheat cv. Milstem). Kings Co. 22 Aug. 1972-C.O.G. (DAOM 147546 conf. M.P.C., R.A.S.).

Leptosphaeria coniothyrium (Fckl.) Sacc. *in* Nuovo G. Bot. Ital. 7:317. 1875.
Stat. conid. *Coniothyrium fuckelii* Sacc.
Common on many hosts in the province, especially *Rubus idaeus* L. (red raspberry), *Rosa* spp. and occasioally on *Malus* spp. (apple), *Prunus* spp. (stone fruit) and *Rhododendron* spp. 6 Nov. 1925-J.F.H. (L.E.W.-407, 463).

Leptosphaeria contecta Kohlm. *in* Nova Hedwigia 6:314. 1963.
On *Spartina alterniflora* Loisel. (cord-grass). Kings Co. 9 Nov. 1975-G.J.B., D.W.G.

Leptosphaeria dolioloides (Auersw.) Karst. *in* Bidr. Finl. Nat. Folk (Mycol. Fenn. 2) 23:106. 1873.

On *Tanacetum vulgare* L. (tansy). Colchester Co. 26 June 1933-L.E.W. (W-1541).

Leptosphaeria doliolum (Pers. ex Fr.) Ces. & de Not. *in* Comm. Soc. Critt. Ital. 1(4):234. (Schema Sfer.:61). 1863.

On stems of *Aster macrophyllus* L. (large-leaved aster), *Aster* sp. and *Solidago* spp. (goldenrod). Colchester Co. 1 Aug. 1929-L.E.W. (W-207, 267, 1208, 1650, 1559).

Leptosphaeria dumetorum Niessl *in* Verh. Nat. Ver. Brünn 10:176. (1871) 1872.

On *Clematis virginiana* L. (virgin's-bower) and *Sambucus pubens* Michx. (red-berried elder). Colchester Co. 1 Aug. 1931-L.E.W. (W-1207, 1708).

Leptosphaeria ellisiana Berl. *in* Icon. Fung. 1:68. 1837.

On *Oenothera* sp. (evening-primrose). Colchester Co. 3 Aug. 1933-L.E.W. (W-1609).

Leptosphaeria herpotrichoides de Not. *in* Comm. Soc. Critt. Ital. 1:80. 1863.

On *Agropyron repens* (L.) Beauv. (couch-grass) and grass culms. Colchester Co. 23 June 1926-L.E.W. (P363, W-1670, 1683).

Leptosphaeria millefolii (Fckl.) Niessl *in* Rabenhorst, Fungi Eur. Exs.:2239. 1874.

On stems of *Achillea millefolium* L. (yarrow). Colchester Co. 23 June 1933-L.E.W. (W-1532).

Leptosphaeria nodorum Müller *in* Phytopathol. Z. 19:409. 1952.

Stat. conid. *Septoria nodorum* Berk.

On *Hordeum vulgare* L. (barley) and *Triticum aestivum* L. (wheat). Colchester and Kings Co. 11 Aug. 1931-J.F.H. (DAOM 147547, 147548, C.O.G., M.P.C.) (O-5458, 5460).

Leptosphaeria obiones (Crouan & Crouan) Sacc. *in* Sacc. *in* Syll. Fung. 2:24. 1883.

Leptosphaeria discors (Sacc. & Ell.) Sacc. & Ell. fide Gessner & Kohlmeyer (1976).

On *Spartina alterniflora* Loisel. (cord grass), *S. patens* (Ait.) Muhl. (high water-grass) and culm material. Kings Co. 9 Aug. 1975-G.J.B., D.W.G.

Leptosphaeria ogilviensis (Berk. & Br.) Ces. & de Not. *in* Comm. Soc. Critt. Ital. 1:61. 1863.

On stems of *Chrysanthemum* sp. and *Solidago* sp. (goldenrod). Colchester Co. 18 June 1926-L.E.W. (P361, W-1557).

Leptosphaeria orae-maris Linder *in* Barghoorn & Linder, Farlowia 1:413. 1944.

On intertidal wood. Shelburne Co. 1970-G.A.N.

Leptosphaeria pelagica Jones *in* Trans. Br. Mycol. Soc. 45:105. 1962.

On driftwood. Halifax and Queens Co. 1970-G.A.N.

Leptosphaeria planiuscula (Riess) Ces. & de Not. *in* Comm. Soc. Critt. Ital. 1:61. 1863.

On stems of *Aster* sp. and *Solidago* sp. (goldenrod). Colchester Co. 19 June 1926-L.E.W. (P365, W-1519, 1520, 1160, 1161, 1604, 1654).

Leptosphaeria rhopalispora Berl. *in* Icon. Fung. 1:81. 1837.

On *Gnaphalium* sp. (cudweed). Colchester Co. 26 June 1933-L.E.W. (W-1542, 1547).

Leptosphaeria vagabunda Sacc. *in* Fungi Ven. Novi vel Critici, Sér. 2:318. 1875.

On *Solidago* sp. (goldenrod). Colchester Co. 19 June 1933-L.E.W. (W-1520).

Leptotherium pomi (Mont. & Fr.) Sacc. *in* Michelia 2:113. 1880.

On fruit of *Malus pumila* Mill. (apple). Kings Co. Jan. 1928-J.F.H.

★ **Leptothyrium rubi** (Duby) Sacc. *in* Michelia 2:351. 1880.

On old floricanes of *Rubus idaeus* L. (red raspberry). Cumberland and Kings Co. 6 May 1970-C.O.G.

Leptothyrium vulgare (Fr.) Sacc. *in* Michelia 2:113. 1880.
On *Aralia nudicaulis* L. (wild sarsaparilla). Colchester Co. July 1931-L.E.W. (W-10).

Letendraea luteola Ell. & Ev. *in* Proc. Acad. Nat. Sci. Phila.:415. 1895.
On decayed wood. Colchester Co. 14 July 1931-L.E.W. (W-1026).

★**Leucocoprinus americana** (Pk.) Redhead *in* Agric. Can. Publ. 1112:323. 1979.
Lepiota americana Pk.
On lawn. Kings Co. 7 Sept. 1951-K.A.H. (KM-1473, 5139 coll. G.L.M. *in* DAOM).

★**Leucocoprinus birnbaumii** (Cda.) Sing. *in* Sydowia 15:67. 1962.
Leucocoprinus luteus (Bolt.) Locquin.
Lepiota lutea (Bolt.) Godfrin.
On soil in greenhouse. Kings Co. Jan. 1958-K.A.H. (KM-4004, 4005, 5161 *in* DAOM).

★**Leucocoprinus cepaestipes** (Sow. ex Fr.) Pat. *in* Tab. Anal. Fung., fig. 612. 1889.
Lepiota cepaestipes (Sow.) Fr.
In silage pit. Kings Co. 2 Sept. 1959-K.A.H. (KM-5148 coll. G.L.M. *in* DAOM).

★**Leucogaster rubescens** Zeller and Dodge *in* Ann. Mo. Bot. Gard. 11:395. 1924.
From Kings Co. 1953-K.A.H. (ACAD 4708 det. A.H.S.).

Leucogyrophana mollusca (Fr.) Pouz. *in* Česká Mykol. 12:32. 1958.
Merulius molluscus Fr.
On *Abies balsamea* (L.) Mill. 1975-L.P.M., J.M.M.

Leucogyrophana olivascens (Berk. & Curt.) Ginns & Weres. *in* Mem. N.Y. Bot. Gard. 28:96. 1976.
From Kings Co. 22 Oct. 1953-K.A.H. (Pl. Pathol. 3066 *in* DAOM).

Leucogyrophana pulverulenta (Fr.) Ginns *in* Can. J. Bot. 56:1966. 1978
Merulius pulverulentus Fr.
Associated with brown rot of boards and timbers in buildings, cellars, etc. Kings Co. 1 Oct. 1953-K.A.H. (KM-2521 *in* DAOM).

Leucogyrophana romellii Ginns *in* Can. J. Bot. 56:1968. 1978.
Merulius fugax Fr.
On *Picea* sp. (spruce). Colchester and Kings Co. 25 Nov. 1952-K.A.H. (KM-2127, 4207 *in* DAOM, R.M.L., W.B.C.) (DAOM 31269).

Leucopaxillus albissimus (Pk.) Sing. var. **piceinus** (Pk.) Sing. & Smith *in* Pap. Mich. Acad. Sci. Arts Lett. 28:104 (1942) 1943.
Clitocybe piceina Pk.
On humus under conifers, on very rotten wood. Colchester Co. 7 Sept. 1931-A.H.S., L.E.W. (W-895).

Leucopaxillus giganteus (Sow. ex Fr.) Sing. *in* Schweiz. Z. Pilzkd. 17:57. 1939.
Agaricus giganteus Sow. ex Fr.
Clitocybe gigantea (Fr.) Quél.
Paxillus giganteus (Sow. ex Fr.) Fr.
From Halifax Co. 1881-J.S.

Libertella betulina Desm. *in* Ann. Sci. Nat. (Paris) 19:276. 1830.
On *Betula lutea* Michx. f. (yellow birch) and other *Betula* sp. (birch). Colchester Co. July 1931-L.E.W. (W-360, 478).

Licea variabilis Schrad. *in* Nov. Gen. Pl. 18. 1797.
On decaying coniferous wood. Pictou Co. 1913-C.L.M. (L.E.W.-1334).

Lignicola laevis Höhnk *in* Veröff. Inst. Meeresforsch. Bremerhaven, 3:216. 1955.
On *Spartina alterniflora* Loisel. (cord-grass). Kings Co. 9 Aug. 1975-G.J.B., D.W.G.

Limacella glioderma (Fr.) Maire *in* Bull. Soc. Mycol. Fr. 40 (1924), 4:294. 1925.
Agaricus gliodermus Fr.

Lepiota glioderma (Fr.) Gill.
On humus under conifers or hardwoods. Colchester Co. and other localities. 1886-J.S. (A.H.M.) (L.E.W.-802 as *Lepiota glioderma*).

Limacella illinita (Fr. ex Fr.) Murr. *in* North Am. Flora 10:40. 1914.
Lepiota illinita (Fr.) Quél.
From Lunenburg Co. 1913-A.H.M.

Lindbladia tubulina Fr. *in* Summa Veg. Scand.:449. 1849.
Lindbladia effusa (Ehr.) Rostaf.
On decaying logs and leaf mold in coniferous woods. Pictou Co. 1906-C.L.M.

Lindra inflata Wilson *in* Trans. Br. Mycol. Soc. 39:411. 1956.
On intertidal wood. Digby and Lunenburg Co. 1970-G.A.N.

Lirula macrospora (Hartig) Darker *in* Can. J. Bot. 45:1422. 1967.
On needles of *Picea glauca* (Moench) Boss (white spruce), *P. mariana* (Mill.) BSP. (black spruce) and *P. rubens* Sarg. (red spruce). Pictou Co. 1973. (Forest Insect and Disease Survey:28. 1973).

Lirula mirabilis (Darker) Darker *in* Can. J. Bot. 45:1422. 1967.
On *Abies balsamea* (L.) Mill. (balsam fir). 1974. (For. Insect Dis. Surv.:32. 1974).

Lirula nervata (Darker) Darker *in* Can. J. Bot. 45:1422. 1967.
On *Abies balsamea* (L.) Mill. (balsam fir). Inverness and Lunenburg Co. 6 Aug. 1931-L.E.W. (W-1255 det. M.L.L.).

Lophidium compressum (Pers.) Sacc. *in* Michelia 1:340. 1878, var. **microscopicum** Karst. *in* Medd. Soc. Fauna Flora Fenn. 11:140. 1884.
Fauna Flora Fenn. 11:140. 1884.
On decorticated *Betula* sp. (birch). Colchester Co. 15 July 1931-L.E.W. (W-1038).

★ **Lophium mytilinum** (Pers.) Fr. *in* Syst. Mycol. 2:533. 1823.
On wood of *Picea mariana* (Mill.) BSP. (black spruce). Kings Co. 5 May 1953-D.W.C.

Lophodermium cladophilum (Lév.) Rehm *in* Krypt. Fl., Pilze 3:42. 1889.
On *Vaccinium angustifolium* Ait. (lowbush blueberry). Kings Co. 20 Aug. 1941-G.W.H.

Lophodermium exaridum (Cke. & Pk.) Sacc. *in* Syll. Fung. 2:792. 1883.
On leaves of *Kalmia angustifolia* L. (lambkill). Colchester Co. 22 July 1935-L.E.W. (W-1667).

Lophodermium juniperi (Grev.) Darker *in* Can. J. Bot. 45:1431. 1967.
On *Juniperus communis* L. (common juniper). Colchester Co. 7 July 1931-L.E.W. (W-415 det. M.L.L.).

Lophodermium laricinum Duby *in* Mém. Soc. Phys. Hist. Nat. Genève 16:58. 1861.
On *Larix* sp. (larch). 1975-L.P.M:, J.M.M.

Lophodermium melaleucum (Fr. ex Fr.) de Not *in* G. Bot. Ital. (2) 2:44. 1847.
On leaves of *Rhododendron canadense* (L.) Torr. (rhodora) and *Vaccinium vitis-idaea* L. var. *minus* Lodd. (foxberry). Colchester and Halifax Co. 30 June 1931-L.E.W. (W-333 det. M.L.L.).

Lophodermium nitens Darker *in* Contrib. Arnold Arbor. 1:74. 1932.
On leaves of *Pinus strobus* L. (white pine). Colchester and Digby Co. 1932-G.D.D. (L.E.W.-1663).

Lophodermium piceae (Fckl.) Höhn. *in* Sitzungsber. K. Akad. Wiss. Math.-Naturwiss. Kl. 126(1):296. 1917.
On needles of *Picea glauca* (Moench) Voss (white spruce). Colchester Co. 19 June 1926-L.E.W. (P377 det. M.L.L.).

Lophodermium pinastri (Schrad. ex Hook.) Chev. *in* Flore Paris 1:436. 1826.
On *Pinus banksiana* Lamb. (jack pine), *P. resinosa* Ait. (red pine), *P. strobus* L.

(white pine) and *P. sylvestris* L. (Scots pine). Colchester Co. 23 June 1926-L.E.W. (P370 det. M.L.L.).

Lophomerum autumnale (Darker) Magasi *in* Mycologia 58:275. 1966.
Lophodermium autumnale Darker.
On *Abies balsamea* (L.) Mill. (balsam fir). Guysborough Co. 1932-G.D.D.

Lulworthia halima (Diehl & Mounce in Mounce & Diehl) Cribb & Cribb *in* Pap. Univ. Queensl. Dep. Bot. 3(10):80. 1955.
Halophiobolus halimus (Diehl & Mounce in Mounce & Diehl) Linder in Barghoorn & Linder.
Linocarpon halimum (Diehl & Mounce in Mounce & Diehl) Petrak.
Ophiobolus halimus Diehl & Mounce.
On *Zostera marina* L. (eelgrass). Halifax Co. 21 Nov. 1934. (DAOM 114060).

Lulworthia medusa (Ell. & Ev.) Cribb & Cribb *in* Pap. Univ. Queensl. Dep. Bot. 3(10):80. 1955.
On intertidal wood. Digby, Kings, Lunenburg and Shelburne Co. 1970-G.A.N.

Lulworthia spp. Sutherland *in* Trans. Br. Mycol. Soc. 5:259. 1916.
On *Spartina alterniflora* Loisel. (cord-grass), wood and culm material. Kings Co. 9 Aug. 1975-G.J.B., D.W.G. (Ascorspores of N.S. material measured 280-370 x 2.5-5.0μ, ACAD).

Lycogala epidendrum (L.) Fr. *in* Syst. Mycol. 3:80. 1829.
On coniferous wood. General. 1881-J.S. (L.E.W.-342).

Lycoperdon echinatum Pers. per Pers. *in* Syn. Fung.:147. 1801.
Lycoperdon gemmatum Batsch var. *echinatum* (Pers.) Fr.
From Pictou Co. 1908-A.H.M.

Lycoperdon foetidum Bon. *in* Handb. Allg. Mykol.:253. 1851.
Lycoperdon peckii Morg.
From Annapolis, Hants, Kings and Lunenburg Co. 1977-S.F.M. (S.F.M.-117, 220, 222, 228-233, 310 *in* ACAD) (DAOM 111308 as *L. perlatum*).

Lycoperdon lividum Pers. *in* J. Bot. 2:18. 1809.
From Kings Co. 1977-S.F.M. (S.F.M.-341 *in* ACAD).

Lycoperdon marginatum Vitt. ex Moris & de Not *in* Flora Caprariae:226. 1839.
Lycoperdon candidum Pers.
From Annapolis, Hants and Kings Co. 1950-L.E.W. (S.F.M.-179, 183, 330-334 *in* ACAD).

Lycoperdon perlatum Pers. *in* Syn. Fung.:115. 1801.
Lycoperdon gemmatum Batsch.
On humus and badly decayed logs. Annapolis, Colchester, Hants and Kings Co. 17 July 1931-L.E.W. (W-1076, 1076a,b) (DAOM 111312, 39430, 39441 Kings Co.) (S.F.M.-206, 208, 302, 320, 392 *in* ACAD) (KM-2217 *in* DAOM coll. K.A.H. det. C.A. Bowerman).

Lycoperdon pyriforme (Schaeff.) Pers. *in* Syn. Fung.:148. 1801.
On stumps, logs or decaying wood. General. 1881-J.S. (L.E.W.-235 coll. A.R.P.) (KM-1086, 1087, 2215 *in* DAOM, K.A.H.) (ACAD 8739) (S.F.M.-203, 204, 385, 386 *in* ACAD).

Lycoperdon rimulatum Pk. *in* Trans. Wis. Acad. Sci. Arts Lett. 7:117. 1888.
On sandy lawn. Kings Co. 26 Oct. 1953-K.A.H. (KM-2213, 2214 *in* DAOM, det. C.A. Bowerman) (ACAD 2213, 2214).

Lycoperdon umbrinum Pers. *in* Syn. Fung.:147. 1801.
Lycoperdon molle Pers.
On soil humus of decayed logs. Annapolis, Colchester, Hants, Kings, Lunenburg and Richmond Co. 24 July 1931-L.E.W. (W-1136a,c, 1137) (DAOM 39397, Kings Co.) (S.F.M.-341, 342, 280, 281, 304, 349 and 374 as *Lycoperdon molle* Per., *in* ACAD).

Lyophyllum connatum (Schum. ex Fr.) Sing. *in* Schweiz Z. Pilzkd. 17:55. 1939.
Clitocybe connata (Schum.) Bres.
On decayed stump. Colchester Co. 21 Aug. 1931-A.H.S., L.E.W. (W-807).

Lyophyllum decastes (Fr. ex Fr.) Sing. *in* Lilloa 22:165. 1951.
Agaricus decastes Fr.
Clitocybe multiceps Pk.
In pastures, fields, grassy roadside and open woods, usually of broad-leaved trees. Lunenburg Co. 1913-A.H.M. (KM-3981-3983, 5398 *in* DAOM, K.A.H.).

Lyophyllum fumosum (Pers. ex Fr.) Orton *in* Trans. Br. Mycol. Soc. 43(2):178. 1960.
Clitocybe fumosus Pers. ex Fr.
Tricholoma cinerascens (Fr.) Gill.
Under conifers. Halifax and Lunenburg Co. 1880-J.S. (A.H.M.).

Lyophyllum immundum (Berk.) Kühner *in* Bull. Mens. Soc. Linn. Lyon 7:211. 1938.
Agaricus immundus Berk.
Tricholoma immundum (Berk.) Quél.
Tricholoma crassifolium (Fr.) Sacc.
Under *Picea* sp. (spruce). Halifax Co. 1880-J.S. (A.H.M. as *T. crassifolium*).

★**Lyophyllum palustre** (Pk.) Sing. *in* Schweiz. Z. Pilzkd. 17:55. 1939.
Common on sphagnum moss. Kings Co. 1954. Identified by A.H. Smith from color transparency taken by K.A.H.

Macrolepiota procera (Scop. ex Fr.) Sing. *in* Pap. Mich. Acad. Sci. Arts Lett. 32:141. 1946.
Lepiota procera (Fr.) Quél.
Near old stumps, in pastures and open fields. Annapolis, Colchester and Kings Co. 1908-A.H.M. (KM-527, 530, 1886, 2692 *in* DAOM, K.A.H.) (L.E.W.-763).

Macrophomina phaseolina (Tassi) Goid. *in* Ann. Sper. Agrar., N.S. 1:457. 1947.
Botryodiplodia phaseoli (Maubl.) Thir.
Macrophomina phaseoli (Maubl.) Ashby.
Rhizoctonia bataticola (Taub.) Butler.
Sclerotium bataticola Taub.
From crown of *Fragaria* sp. (cultivated strawberry). Kings Co. 8 Mar. 1962-C.O.G., S.J.H., J.W.G. (DAOM 88674).

Macrotyphula fistulosa (Holmsk. ex Fr.) Petersen *in* Mycologia 64:140. 1972.
Clavaria fistulosa Holmsk. ex Fr.
Clavariadelphus fistulosus (Holmsk. ex Fr.) Corner.
Buried beneath *Alnus* sp. (alder). Kings Co. 27 Sept. 1928-K.A.H. (KM-615 *in* DAOM) (TENN 31595).

Marasmius androsaceus (L. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:385. 1838.
Marasmius melanopus Morg.
Scattered, on conifer needles. Colchester Co. 27 June 1931-A.H.S., L.E.W. (W-506) (MICH 11625, 11630, K.A.H.).

Marasmius capillaris Morg. *in* J. Cinc. Soc. Nat. Hist. 6:194. 1883.
On needles of *Picea* sp. (spruce). Kings Co. 16 July 1972-K.A.H. (MICH 11595 det. Tina Gilliam).

Marasmius cohaerens (Alb. & Schw. ex Fr.) Cke & Quél. *in* Clavis Hymen.:153. 1878, var. **lachnophyllus** (Berk. in Lea) Gilliam *in* Mycotaxon 4(1):64. 1976.
Among leaves in woods of *Acer* sp. (maple) and *Fagus* sp. (beech). Colchester, Halifax and Kings Co. 2 Sept. 1931-A.H.S., L.E.W. (W-856) (A.H.S.-555) (KM-377, 378 *in* DAOM, K.A.H.).

Marasmius glabellus Pk. *in* Bull. Buffalo Soc. Nat. Sci. 1:58. 1873 (1874).
On soil and on decayed leaves in deciduous woods. Kings Co. 12 July 1931-K.A.H. (KM-380 *in* DAOM, fide A.H.S.).

Marasmius oreades (Bolt. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:375. 1838.
General on lawns, pastures and other grassy areas. General. 1880-J.S. (KM-381, 878, 2702 *in* DAOM, K.A.H.) (L.E.W.-250, 697).

Marasmius pallidocephalus Gilliam *in* Mycologia 67:818. 1975.
On twigs of *Tsuga canadensis* (L.) Carr. (hemlock). Kings Co. 15 July 1972-K.A.H. (MICH 11580, 11596, 11598, 11600, 11601, 11602a, 11632, 11635, 11637, det. Tina Gilliam).

Marasmius perforans (Hoffm. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:385. 1838.
On needles of *Picea* sp. (spruce). Kings Co. 16 July 1972-K.A.H. (MICH 11602, 11631 det. Tina Gilliam).

Marasmius peronatus (Fr.) Fr. *in* Epicr. Syst. Mycol.:373. 1838.
See *Collybia peronata* (Bolt. ex Fr.) Sing.

Marasmius rotula (Scop. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:385. 1838.
Under conifers and hardwoods. Annapolis, Colchester and Kings Co. 27 June 1931-A.H.S., L.E.W. (W-56, 507) (KM-383, 384, 2703 *in* DAOM, K.A.H.). (MICH 7572, K.A.H.).

Marasmius scorodonius (Fr.) Fr. *in* Epicr. Syst. Mycol.:379. 1838.
On leaves and sticks, among soil debris. Colchester and Kings Co. 22 July 1931-A.H.S., L.E.W. (W-689) (KM-385, 386, 2704 *in* DAOM, K.A.H.) (MICH 11577-11579, 11590, 11626, K.A.H.).

Marasmius siccus (Schw.) Fr. *in* Epicr. Syst. Mycol.:382. 1838.
Among hardwood leaves. Cape Breton, Colchester and Queens Co. 23 July 1931-A.H.S., L.E.W. (W-692) (KM-387, 5399 *in* DAOM, K.A.H.).

Marasmius terginus Fr. *in* Epicr. Syst. Mycol.:377. 1838.
Halifax and Pictou Co. 1881-J.S. (A.H.M.).

Marasmius uliginosus Gilliam *in* Mycologia 67:826. 1975.
See *Strobilurus albipilatus* (Pk.) Wells & Kempton.

Marssonina brunnea (Ell. & Ev.) Magn. *in* Hedwigia 45:89. 1906.
On *Populus grandidentata* Michx. (large-toothed aspen) and *P. tremuloides* Michx. (trembling aspen). Annapolis, Kings and Queens Co. 19 July 1952-D.W.C. (DAOM 35049, 55660, 55661 coll. W.R. Newell).

Marssonina castagnei (Desm. & Mont.) Magn. *in* Hedwigia 45:89. 1906.
Gloeosporium castagnei Desm. & Mont.
See stat. perf. *Drepanopeziza populi-albae* (Kleb.) Nannf. (not known in Canada—Conners, 1967).

Marssonina daphnes (Desm. & Rob.) Magn. *in* Hedwigia 45:90. 1906.
Gloeosporium mezerei Cke.
On *Daphne mezereum* L. (daphne). Kings Co. 20 July 1944-J.F.H., I.L.C.

★**Marssonina juglandis** (Lib.) Magn. *in* Hedwigia 45:88. 1906.
See stat. perf. *Gnomonia leptostyla* (Fr.) Ces. & de Not.

Marssonina lappae Smith & Ramsb. *in* Trans Br. Mycol. Soc. 4:179. 1913.
On leaves of *Arctium minus* (Hill) Bernh. (common burdock). Yarmouth Co. 11 Sept. 1952-D.W.C., A.E.R.

Marssonina populi (Lib.) Magn. *in* Hedwigia 45:89. 1906.
See stat. perf. *Drepanopeziza populorum* (Desm.) Höhn.

★**Marssonina potentillae** (Desm.) Magn. *in* Hedwigia 45:90. 1906.
On *Potentilla pacifica* Howell (silverweed) and *P. simplex* Michx. (fire-finger). Kings Co. 20 Aug. 1952-D.W.C.

Marssonina sennenis Gonz. Frag. *in* Trab. Mus. Nac. Cienc. Nat. Madrid, Ser. Bot. 9:90. 1916.
On *Sanguisorba canadensis* L. (Canadian burnet). Inverness Co. Aug. 1956-D.B.O.S. (Savile 3274 *in* DAOM).

Marssonina tremulae (Lib.) Kleb. *in* Haupt. und Nebenfruchtf. Ascomyc.:357. 1918.
See stat. perf. *Drepanopeziza tremulae* Rimpau.

Massaria inquinans (Tode ex Fr.) de Not. *in* G. Bot. Ital. 1:333. 1844.
Sphaeria inquinans (Tode) Fr.
On *Acer spicatum* Lam. (mountain maple). Colchester Co. 4 July 1931-L.E.W. (W-395, 1685).

Massaria pyri Otth *in* Tulasne & Tulasne, Sel. Fung. Carp. 2:237. 1863.
Cladosphaeria pyri (Otth in Tul. & Tul.) Otth.
Massaria pruni Wehm.
On twigs of *Amelanchier* sp. (wild pear, shadbush), *Betula papyrifera* Marsh. (white birch) and *Prunus* sp. (stone fruit). Colchester Co. 13 July 1931-L.E.W. (W-500, 1007, 1597 as *M. pruni*).

Massaria salilliformis Wehm. *in* Can. J. Res., C, 20:586. 1942.
On *Populus grandidentata* Michx. (large-toothed aspen). Colchester and Kings Co. 1 July 1931-L.E.W. (W-350, 1684).

Mastigosporium album Riess *in* Fresenius, Beitr. Mykol. 2:56. 1852.
On leaves of *Alopecurus pratensis* L. (meadow foxtail). Halifax and Kings Co. 15 June 1953-D.W.C. (DAOM 38810).

Mastigosporium rubricosum (Dearn. & Barth.) Nannf. *in* Fungi Exs. Suec., fasc. 17/18, 876:32. 1939.
On leaves of *Dactylis glomerata* L. (orchard grass, cock's-foot). Digby Co. 10 Aug. 1955-G.G.S., D.W.C.

Melampsora abietis-canadensis (Farl.) Ludwig ex. Arth. *in* North Am. Flora 7:664. 1924.
On *Populus grandidentata* Michx. (large-toothed aspen), *P. tremuloides* Michx. (trembling aspen) and *Tsuga canadensis* (L.) Carr. (hemlock). General. 1913-W.P.F.

Melampsora abieti-capraearum Tub. *in* Centralbl. Bakt. 2.9:241. 1902.
On *Abies balsamea* (L.) Mill. (balsam fir), *Salix bebbiana* Sarg. (long-beaked willow), *S. discolor* Muhl. (pussy-willow) and *S. humilis* Marsh. (small pussy-willow). General. 1912-W.P.F. (O-1883, 4939, 4941) (L.E.W.-1511).

Melampsora euphorbiae (Schub.) Cast. *in* Obs. Mycol. 2:18. 1843.
On *Euphorbia cyparissias* L. (cypress spurge). Kings Co. 1950-L.E.W. (R-113, A.E.R.).

Melampsora farlowii (Arth.) Davis *in* Trans Wis. Acad. Sci. Arts Lett. 18:107. 1915.
On *Tsuga canadensis* (L.) Carr. (hemlock). 1907-J.C.A. (1912-M.P.F.).

Melampsora medusae Thüm. *in* Bull. Torrey Bot. Club 6:216. 1878.
On *Larix laricina* (DuRoi) K. Koch (larch), *Populus grandidentata* Michx. (large-toothed aspen) and *P. tremuloides* Michx. (trembling aspen). Kings Co. and others. 1913-A.H.M. (R-100, A.E.R.).

Melampsora paradoxa Diet. & Holw. *in* Dietel, Hedw. Beibl. 40:32. 1901.
On *Larix laricina* (DuRoi) K. Koch (larch), *Salix bebbiana* Sarg. (long-beaked willow) and *S. discolor* Muhl. (large pussy-willow). General. 1913-W.P.F. (L.E.W.-1112).

Melampsora ribesii-purpureae Kleb. *in* Jahrb. Wiss. Bot. 35:667. 1901.
On *Salix* sp. (willow). Colchester Co. 3 Aug. 1933-L.E.W. (W-1619).

Melampsorella caryophyllacearum Schroet. *in* Hedwigia 13:85. 1874.
See *Chrysomyxa arctostsaphyli* Diet.

Melampsoridium betulinum (Fr.) Kleb. *in* Z. Pflanzenkr. 9:21. 1899.
On *Betula lutea* Michx. f. (yellow birch) and *B. populifolia* Marsh. (wire birch). Pictou Co. 1913-W.P.F.

Melanconis alni Tul. var. **alni** *in* Ann. Sci. Nat., Sér. 4, 5:109. 1856.
Stat. conid *Melanconium sphaeroideum* Link.
Conidial stage reported on *Alnus crispa* var. *mollis* Fern. (downy alder). Kings Co. 1950-L.E.W. (N.R.C. pub. no. 1890, 1950).

Melanconis alni Tul. var. **marginalis** (Pk.) Wehm. *in* Univ. Mich. Stud. Sci., Ser. 14:27. 1941.
On *Alnus crispa* (Ait.) Pursh var. *mollis* Fern. (downy alder) and other *Alnus* sp. Colchester, Halifax and Hants Co. 5 Sept. 1929-L.E.W. (W-277, 1607, 1660).

Melanconis apocrypta Ell. *in* Am. Nat. 17:194. 1883.
On *Populus* sp. (poplar). Colchester Co. 7 July 1933-L.E.W. (W-1578, 1735).

★ **Melanconis decorahensis** Ell. *in* Am. Nat. 17:195. 1883.
On wood of *Betula alba* L. (white birch). Isle Haute, Cumberland Co. 5 June 1953-D.W.C.

Melanconis everhartii Ell. *in* Bull. Torrey Bot. Club 10:117. 1883.
On *Acer. spicatum* Lam. (mountain maple). Colchester Co. 31 Aug. 1927-L.E.W. (W-35, 1395).

★ **Melanconis juglandis** (Ell. & Ev.) Groves var. **juglandis** *in* Phytopathology 13: 411.1923.
On wood of *Juglans cinerea* L. (butternut or white walnut). Kings Co. 8 Apr. 1950-K.A.H., D.W.C.

Melanconis juglandis (Ell. & Ev.) Groves var. **tiliae** Wehm. *in* Univ. of Mich. Stud. Sci., Ser. 14:41. 1941.
On wood of *Tilia cordata* Mill. (small-leaved linden). Kings Co. 13 June 1952-D.W.C.

Melanconis nigrospora (Pk.) Wehm. *in* Mycologia 32:327. 1940
On *Betula* sp. (birch). Colchester Co. 8 Aug. 1929-L.E.W. (W-219, 1191, 1376, 1527, 1630).

★ **Melanconis ostryae** (Dearn.) Wehm. *in* Mycologia 29:601. 1937.
On wood of *Ostrya virginiana* (Mill.) K. Koch (ironwood or American hop-hornbeam). Kings Co. 22 May 1952-D.W.C.

Melanconis stilbostoma (Fr.) Tul *in* Ann. Sci. Nat., Sér. 4, 5:109. 1856.
Stat. conid. *Melanconium betulinum* Schm. & Kuntze.
On *Betula alba* L. (white birch) and *B. lutea* Michx. f. (yellow birch). Colchester and Kings Co. 8 July 1931-L.E.W. (W-429, 435, 1011, 1622, 1652, 1661) (DAOM 4857).

Melanconis thelebola (Fr.) Sacc. *in* Syll. Fung. 1:605. 1882.
On *Alnus* sp. (alder). Colchester Co. 18 Sept. 1926-L.E.W. (W-110, 286, 286a, 1671).

★ **Melanoleuca alboflavida** (Pk.) Murr. *in* North Am. Flora 10(1):6. 1914.
Tricholoma alboflavidum Pk.
From Kings Co. 6 Oct. 1952-K.A.H. (KM-1782 *in* DAOM).

Melanoleuca brevipes (Bull. ex Fr.) Pat. *in* Ess. Taxon. Hymén.:158. 1900.
Tricholoma brevipes (Fr.) Quél.
Agaricus brevipes Fr.
From Lunenburg Co. 1913-A.H.M. (KM-2737 *in* DAOM, K.A.H.).

***Melanoleuca melaleuca** (Pers. ex Fr.) Murr. *in* North Am. Flora 10(10):7. 1914.
Tricholoma melaleucum (Pers ex. Fr.) Kummer.
On a lawn. Kings Co. 10 Oct. 1952-K.A.H. (KM-1760 *in* DAOM).

Melanoleuca schumacheri (Fr. sensu Killermann) Sing. *in* Schweiz. Z. Pilzkd. 17:56. 1939.
Tricholoma schumacheri (Fr.) Gill.
From Annapolis Co. 1913-A.H.M.

Melanomma disjectum (Karst.) Sacc. *in* Michelia 1:344. 1878.
On decayed stump. Colchester Co. 19 July 1929-L.E.W. (W-168).

Melanomma pulvis-pyrius (Pers.) Fckl. *in* Symb. Mycol.:160. 1869.
On decorticated wood and sticks. Colchester Co. 11 Aug. 1931-L.E.W. (W-1275, 1591).

★**Melanomma rhododendri** Rehm *in* Ascomyceten:186. 1878.
On wood of *Rhododendron* sp. (cv. Gamon Waterer). Kings Co. 9 July 1974-C.O.G., R.A.S. (DAOM 148687).

Melanomma subsparsum Fckl. *in* Symb. Mycol.:160. 1869.
On *Betula* sp. (birch), *Sorbus americana* Marsh. (mountain ash) and decorticated wood. Colchester and Victoria Co. 6 July 1931-L.E.W. (W-409, 472, 476, 1244).

Melanopsichium pensylvanicum Hirschh. *in* Notas Mus. La Plata Bot. 6 (no. 32): 149. 1941.
On *Polygonum pensylvanicum* L. (pinkweed, knotweed). Kings Co. 1950-L.E.W. (A.E.R. 127 det. H.S.J. as *M. astro-americanum* (Speg.) Beck.)

Meloderma desmazierii (Duby) Darker *in* Can. J. Bot. 45:1429. 1967.
Lophodermium brachysporum Rostr.
On *Pinus strobus* L. (white pine). Digby Co. 1932-G.D.D. (Contrib. Arnold Arbor. p. 26. 1932).

Meria coniospora Dreschler *in* Phytopathology 31:792. 1941.
In association with nematodes from compost, dung (chicken, cow, hog, sheep) and straw. Kings Co. 1980-M.E.A.

Merismodes fasciculatus (Schw.) Earle *in* Bull. N.Y. Bot Gard. 5:406. 1909.
Cyphella fasciculatus Schw.
On *Alnus crispa* (Ait). Pursh var. *mollis* Fern. (downy alder) and other *Alnus* spp. Annapolis, Colchester and Kings Co. 1881-J.S. (as *C. fulva* Berk. & Rav.) (L.E.W.-1006, 1408 fide M.A.D.) (KM-2767, 4344-4348 *in* DAOM, K.A.H.) (ACAD 1694).

★**Merismodes ochraceus** (Pers.) Reid *in* Persoonia 3:113. 1964.
Henningsomyces ochracea (Hoffm. ex Fr.) Kuntze.
Solenia ochracea Hoffm. ex Fr.
On hardwood and *Populus* sp. (poplar) in mixed woods. Kings Co. 5 Nov. 1952-K.A.H. (KM-1569 *in* DAOM) (ACAD 1693).

Merulius aureus Fr. *in* Elench. Fung.:62. 1828.
On coniferous wood, *Pinus* sp. (pine). Colchester Co. 1935-L.E.W. (W-1758) fide H.S.J. (KM-3094 *in* DAOM, K.A.H. det. R.M.).

★**Merulius confluens** Schw. ex Fr. *in* Elench. Fung.:57. 1828.
Merulius corium (Pers.) Fr.
On coniferous wood. Lunenburg Co. 13 Nov. 1953-K.A.H. (KM-2846 *in* DAOM).

Merulius fugax Fr. *in* Syst. Mycol. 1:328. 1821.
See *Leucogyrophana romellii* Ginns.

Merulius mollusca Fr. *in* Syst. Mycol. 1:329. 1821.
See *Leucogyrophana mollusca* (Fr.) Pouz.

Merulius porinoides Fr. *in* Syst. Mycol. 1:329. 1821.
See *Ceraceomyces serpens* (Fr.) Ginns.

Merulius tremellosus Schrad. ex Fr. *in* Syst. Mycol. 1:327. 1821.
On *Acer* sp. (maple), *Fagus grandifolia* Ehrh. (beech) and *Malus* sp. (apple). Annapolis, Kings, Lunenburg and Pictou Co. 3 Dec. 1932-K.A.H. (KM-91, 756, 998 *in* DAOM) (Pl. Path. 1606, 1663, 2062 *in* DAOM).

★**Metarrhizium anisopliae** (Metsch.) Sorok. *in* Plant Parasites of Man and Animals as Causes of Infectious Diseases (in Russian) 2:267. 1883.

Metarrhizium brunneum Petch (1935).
From milled peat, *Sphagnum* sp. Kings Co. 12 April 1961-C.O.G. (DAOM 88235 as *M. brunneum,* fide S.J.H.).

✝**Metasphaeria squamata** (Cke. & Ell.) Sacc. *in* Syll. Fung. 11:167. 1883.
On *Pinus strobus* L. (white pine). Kings Co. 26 Feb. 1951-C.L.L., D.W.C.

Metatrichia vesparium (Batsch) Nann.-Brem. *in* K. Ned. Akad. Wet., C., 69:146. 1966.
Hemitrichia vesparium (Batsch) MacBr.
On decaying *Populus tremuloides* Michx. (trembling aspen). Pictou Co. 1906-C.L.M.

Microglossum arenarium Rostr. *in* Medd. Gronl. 3:606. 1892.
Corynetes arenarius (Rostr.) Durand.
From Kings Co. 15 Sept. 1931-K.A.H. (KM-1004 *in* DAOM) (ACAD 1004).

Microglossum atropurpureum (Batsch ex Fr.) Karst. *in* Acta Soc. Fauna Flora Fenn. 2(6):110. 1885.
Corynetes robustus Durand.
Microglossum sp. (Can. J. Bot. 45:1629. 1967).
Thuemenidium atropurpureum (Batsch ex Fr.) Kuntze.
On soil. Colchester, Hants and Kings Co. 27 Aug. 1931-L.E.W. (W-1426 leg. A.H.S., 1426a) (MICH 1426, A.H.S.) (KM-1005, 1042, 1518, 1522-1525, 5514 *in* DAOM, K.A.H.). (ACAD 1005, 1005a,b, K.A.H.).

Microglossum fumosum (Pk.) Durand *in* Ann. Mycol. 6:408. 1908.
On rotten wood. Halifax Co. 26 July 1931-K.A.H. (KM-1021 *in* DAOM) (ACAD 1021, 1021a).

Microglossum olivaceisquamulosum Grund & Harrison *in* Can. J. Bot. 45:1630. 1967.
On open ground. Hants and Kings Co. 5 Sept. 1932-K.A.H. (KM-1022, *in* DAOM) (ACAD 1022, 1022a).

Microglossum olivaceum (Pers. ex Fr.) Gill. *in* Champ. Fr., Discom.:26.1879.
From Kings Co. 5 Sept. 1938-K.A.H. (KM-1060 *in* DAOM).

Microglossum rufum (Schw.) Underw. *in* Minn. Bot. Stud. 1:496. 1896.
On soil, on rotten wood. Annapolis, Colchester, Halifax, Inverness and Kings Co. 26 Aug. 1927-L.E.W. (W-439, 1099, 1099a) (A.R.P.-6112, 6217) (KM-1023, 1059 *in* DAOM, K.A.H.) (ACAD 1023, 1023a,b, K.A.H.).

Microglossum viride (Pers. ex Fr.) Gill. *in* Champ. Fr., Discom.:25. 1879.
On soil in mixed woods. Cumberland, Hants and Kings Co. 29 Aug. 1931-L.E.W. (W-1432 leg. A.H.S.) (KM-1024, 1058 *in* DAOM, K.A.H.) (ACAD 1024, 1024a,b, K.A.H.).

Micromphale foetida (Sow. ex Fr.) Sing. *in* Lloydia 8:182. 1945.
Agaricus foetidus Sow. ex Fr.
Marasmius foetidus (Sow.) Fr.
On hardwood twigs and sticks. Colchester Co. 11 July 1931-A.H.S., L.E.W. (W-606) (KM-379 *in* DAOM, K.A.H.) (ACAD 13669, K.A.H., 1981).

Micronectriella nivalis (Schaffn.) Booth *in* The Genus *Fusarium*: 42-43. 1971 (C.M.I.).
See *Monographella nivalis* (Schaff.) E. Müller var. *nivalis.*

Micropera drupacearum Lév. *in* Ann. Sci. Nat. Bot., Sér. 3, 5:283. 1846.
See stat. perf. *Dermea cerasi* (Pers. ex Fr.) Fr.

Micropera sorbi (Fr.) Sacc. *in* Michelia 2:104. 1880.
See stat. perf. *Dermea aries* (Pers. ex Fr.) Tul.

Micropera spuria Höhn. *in* Fragm. Mykol.:950. 1916.
See stat. perf. *Dermea prunastri* (Pers. ex Fr.) Fr.

Micropera stellata (Ell.) Jacz. *in* Nouv. Mém. Soc. Imp. Nat. Moscou 15:366. 1898.
See stat. perf. *Dermea peckiana* (Rehm) Groves.

Microsphaera diffusa Cke. & Pk. *in* J. Bot., N.S., 1:13. 1872.
On *Desmodium canadense* (L.) DC. (Canada tick-clover). Pictou Co. 1909-W.P.F.

Microsphaera grossulariae (Wallr.) Lév. *in* Ann. Sci. Nat. Bot., Sér. 3, 15:160. 1851.
On *Sambucus canadensis* L. (common elder). Pictou Co. 1909-W.P.F.

Microsphaera penicillata (Wallr. ex Fr.) Lév. *in* Ann. Sci. Nat. Bot., Sér. 3, 15:153. 1851.
Microsphaera alni (Wallr.) Salm.
Mildew on species of *Alnus* (alder), *Azalea, Betula* (birch), *Corylus* (hazlenut), *Fagus* (beech), *Ilex* (English holly), *Lonicera* (honeysuckle), *Quercus* (oak), *Rhododendron, Syringa* (lilac) and *Viburnum* (witherod). General. 1909-W.P.F. (L.E.W.-1478, 1494).

Microsphaera russellii Clint. *in* Annu. Rep. N.Y. State Mus. 26:80. 1874.
On *Oxalis stricta* L. (yellow wood-sorrel). Pictou Co. 1909-W.P.F.

Microsphaera vaccinii (Schw.) Cke. & Pk. *in* J. Bot., N.S., 1:13. 1872.
Mildew on *Epigaea repens* L. (mayflower). *Gaylussacia baccata* (Wang.) K. Koch (black huckle-berry), *Vaccinium angustifolium* Ait. (lowbush blueberry) and *V. corymbosum* L. (highbush blueberry). General. 1909-W.P.F. (O-4505).

Microstroma juglandis (Bereng.) Sacc. *in* Syll. Fung. 4:9. 1886.
On leaves of *Juglans cinerea* L. (butternut or white walnut). Kings Co. 13 Aug. 1953-J.F.H.

Microthecium retisporum Udagawa & Cain *in* Can. J. Bot. 47:1926. 1969.
From soil. Cumberland Co. 1980-D.B., A.T.

Milesia fructuosa Faull *in* Contrib. Arnold Arbor. 2:51. 1932.
Milesia intermedia Faull.
On *Abies balsamea* (L.) Mill. (balsam fir) and *Dryopteris spinulosa* (O.F. Muell.) Watt (wood fern). Guysborough Co. 30 July 1929-J.H.F. (Faull 9272).

Milesia pycnograndis Arth. *in* North Am. Flora 7:685. 1925.
On *Abies balsamea* (L.) Mill. (balsam fir) and *Polypodium virginianum* L. (rock polypody). Queens Co. 23 July 1929-J.H.F. (Faull 9265).

Mitrula abietis Fr. *in* Syst. Mycol. 1:492. 1821.
See *Heyderia abietis* (Fr.) Link.

Mitrula elegans (Berk.) Fr. *in* Acta R. Soc. Sci. Upsal., Ser. 3(1):119. 1851.
Leotia elegans Berk.
Microglossum elegans (Berk.) Underw.
On decaying wet needles and other wood. Kings, Lunenburg, Queens and Victoria Co. 10 June 1942-R.M.L. (DAOM 7950) (MICH 7584, 7596, 7636, 7676 p.p., K.A.H.) (TRTC, W.L. Klawe) (TENN 28658, R.H.P., P.O.).

Mitrula lunulatospora Redhead *in* Can. J. Bot. 55:318. 1977.
On decaying wet scales, twigs, cones or leaves. Lunenburg and Pictou Co. 1 July 1910-W.P.F. (CUP-D-3-269) (MICH 7676 p.p., K.A.H.).

Mitrula paludosa Fr. *in* Syst. Mycol. 1:491. 1821.
Mitrula phalloides (Bull.) Chev.
Collected on wet leaves in early spring. Annapolis, Hants and Lunenburg Co. 16 July 1933-K.A.H. (KM-1026 *in* DAOM) (ACAD 1026, 1026a,b). *M. paludosa* only occurs in Europe. Specimens reported here as this species are probably *M. elegans,* a common species found only in North America. (Can. J. Bot. 55:318. 1977).

Mollisia benesuada (Tul.) Phill. *in* Br. Discom.:174. 1887.
On *Betula* sp. (birch). Colchester Co. 31 Aug. 1929-L.E.W. (W-266 det. E.K.C.).

Mollisia caepiticia (Karst.) Karst. *in* Bidr. Finl. Nat. Folk 19 (Mycol. Fenn. 1):188. 1871.
On stromata of a *Nectria* sp. and adjacent bark of *Acer* sp. (maple). Colchester Co. 17 July 1935-L.E.W. (W-1746).

Mollisia cinerea (Batsch ex Fr.) Karst. *in* Bidr. Finl. Nat. Folk 19 (Mycol. Fenn. 1): 89. 1871.
On *Alnus* sp. (alder) and *Fagus* sp. (beech). Colchester Co. 14 July 1929-L.E.W. (W-64, 97, 302, 352, 358, 422).

Mollisia melaleuca (Fr.) Sacc. *in* Syll. Fung. 8:337. 1889.
On decayed wood. Colchester Co. 7 July 1931-L.E.W. (leg. A.H.S., 427, det. E.K.C.).

Mollisia stictella Sacc. & Speg. *in* Michelia 1:425. 1878.
On *Acer spicatum* Lam. (mountain maple), *Cornus alternifolia* L.f. (alternate-leaf dogwood) and *Spiraea* sp. (spiraea). Colchester Co. 16 June 1931-L.E.W. (W-498, 1056, 1056a, det. E.K.C.).

Mollisia uda (Pers.) Gill. *in* Champ. Fr., Discom.:127. 1879.
On wood blackened by a surface growth of hyphae. Colchester Co. 22 Aug. 1931-L.E.W. (W.-1392 det. E.K.C.).

Monacrosporium deodycoides (Drechsler) Cke. & Dickinson *in* Trans. Br. Mycol. Soc. 48(4):622. 1965.
Dactylella doedycoides Drechsler.
In association with nematodes from greenhouse soil. Kings Co. 1980-M.E.A.

Monacrosporium ellipsosporum (Grove) Cke. & Dickinson *in* Trans. Br. Mycol. Soc. 48(4):622. 1965.
Dactylella ellipsospora Grove.
In association with nematodes from wood chips. Kings Co. 1980-M.E.A.

Monacrosporium heterosporum (Drechsler) Subram. *in* J. Indian Bot. Soc. 42:293. 1963.
Dactylella heterospora Drechsler.
In association with nematodes from dung (cow, horse), hay and straw. Kings Co. 1980-M.E.A.

Monascrosporium sp.
In association with nematodes from dung (cow), leaf litter and soil. Kings Co. 1980-M.E.A. *(M. pseudoreticulatum* nom. prov., Plate X, in MSc. Thesis, Acadia Univ.).

★**Monilia variabilis** Lind. *in* Mikr. Betriebskontr.:294. 1901.
Oospora variabilis (Lind.) Lind.
From milled peat, *Sphagnum* sp. Kings Co. 1961-C.O.G.

Monilinia amelanchieris (Reade) Honey *in* Mycologia 34:575. 1942.
On fruit clusters of *Amelanchier intermedia* Spach. (shadbush, service-berry, wild pear). Kings Co. 4 June 1952-J.F.H.

Monilinia fructicola (Wint.) Honey *in* Mycologia 20:153. 1928.
Sclerotinia fructicola (Wint.) Rehm.
Causing fruit rot of *Prunus* spp. (stone fruits) and *Malus pumila* Mill. (apple). General. 10 July 1938-J.F.H.

Monilinia fructigena (Aderh. & Ruhl.) Honey *in* Am. J. Bot. 23:105. 1936.
Sclerotinia fructigena Aderh. & Ruhl.
Stat. conid. *Monilia fructigena* Pers.
As *Monilia fructigena* Auct. Am. on *Prunus pensylvanica* L.f. (pin cherry). 1975-L.P.M., J.M.M.

Monilinia johnsonii (Ell. & Ev.) Honey *in* Am. J. Bot. 23:105. 1936.
Ciboria johnsonii Ell. & Ev.
On *Crataegus macrosperma* Ashe (hawthorn). Kings Co. 1952-D.W.C.

Monilinia laxa (Aderh. & Ruhl.) Honey *in* Am. J. Bot. 23:105. 1936.
Sclerotinia laxa Aderh. & Ruhl.
Stat. conid. *Monilia cinerea* Bon.
On wood of *Malus pumila* Mill. (apple), *Prunus avium* L. (sweet cherry), *P. nigra* Ait. (Canada plum), *P. cerasus* L. (sour cherry) and *P. pensylvanica* L.f. (pin cherry). Annapolis and Kings Co. 25 June 1969-C.O.G.

★**Monilinia oxycocci** (Woron.) Honey *in* Am. J. Bot. 23:105. 1936.
Sclerotinia oxycocci Woron.
On twigs and fruit of *Vaccinium macrocarpon* Ait. (cranberry). Annapolis Co. 24 Oct. 1970-C.L.L.

Monilinia vaccinii-corymbosi (Reade) Honey *in* Am. J. Bot. 23:105. 1936.
Sclerotinia vaccinii-corymbosi Reade.
On *Vaccinium angustifolium* Ait. (lowbush blueberry) and *V. corymbosum* L. (highbush blueberry). General. 23 May 1952-C.L.L.

Monodictys pelagica (Johnson) Jones *in* Trans. Br. Mycol. Soc. 46:138. 1963.
On intertidal wood. Shelburne Co. 1970-G.A.N.

★**Monographella nivalis** (Schaff.) E. Müller var. **nivalis,** *in* W. Gams & E. Müller, Neth. J. Plant Pathol. 86:49. 1980.
Calonectria nivalis Schaff. (1913).
Micronectriella nivalis (Schaff.) Booth (1971).
Pink snow mold on *Triticum aestivum* L. (winter wheat). Kings Co. 14 May 1975-C.O.G., R.W.D.

Monostichella alni (Ell. & Ev.) v. Arx *in* Verh. K. Akad. Wet. Afd. Natuurkd. 2, 51, 3:56. 1957.
Gloeosporium alni Ell. & Ev.
On leaves of *Alnus rugosa* (DuRoi) Spreng. (speckled alder). Kings Co. 22 Aug. 1951-D.W.C.

Monostichella coryli (Desm.) Höhn. *in* Sitzungsber. K. Akad. Wiss., Math.-Naturwiss. Kl. 1, 125:95. 1916.
Gloeosporium coryli (Desm.) Sacc.
On *Corylus americana* Marsh. (American hazelnut). Kings Co. 14 July 1931-R.W.W.

Monostichella salicis (Westend.) v. Arx. *in* Verh. K. Ned. Akad. Wet. Afd. Natuurkd., Tweede Reeks, 51:131. 1957.
Gloeosporium salicis Westend.
Gloeosporidiella salicis (Westend.) Nannf.
See stat. perf. *Drepanopeziza salicis* (Tul.) Höhn.

Morchella elata Fr. *in* Syst. Mycol. 2:8. 1822.
Morchella conica Pers.
On soil in wood and open places. Annapolis, Antigonish and Colchester Co. 1908-A.H.M.

Morchella esculenta (L.) Pers. *in* Syn. Fung.:618. 1801.
On ground in woods and open places. Antigonish, Colchester, Halifax and Kings Co. 1908-A.H.M. (KM-1109, 1156 *in* DAOM, K.A.H.).

Morganella subincarnata (Pk.) Kreisel & Dring *in* Feddes Repert. 74:117. 1967.
Lycoperdon subincarnatum Pk.
On logs of *Fagus grandifolia* Ehrh. (beech). Colchester and Kings Co. 12 Aug. 1931-L.E.W. (W-1286, 1296a,b) (ACAD 8735) (KM-2212 coll. K.A.H. det. C.A. Bowerman).

Mortierella alpina Peyron. *in* I Germe Atmospher dei Funghi con Micelio:17. 1913.
On *Betula lutea* Michx. f. (yellow birch). Inverness Co. 1951-D.R. Redmond and V.M. Cutter, Jr. (Mycologia 43:723-726. 1951).

★**Mortierella isabellina** Oud. *in* Flore Mycol. Obtenue par la Culture sur Gelatin etc. in Arch. Neerl. Sci. Exact. Nat.:276. 1902.
From decayed tuber of *Solanum tuberosum* L. (potato), milled peat Sphagnum sp. and callus tissue of *Vaccinium angustifolium* Ait. (lowbush blueberry). Kings Co. 1961-C.O.G., W.B.K.

★**Mortierella ramanniana** (Möller) Linn. var. **ramanniana in** Turner, Trans. Br. Mycol. Soc. 46:268. 1963.
On *Betula lutea* Michx. f. (yellow birch). 1951. On stem base of *Satureja hortensis* L. (summer savory) Tancook Island, Lunenburg Co. 22 Aug. 1977-C.O.G. (DAOM 166508).

★**Mortierella vinacea** Dickson & Stewart *in* Trans. Br. Mycol. Soc. 17:212. 1932.
From roots of *Fragaria* sp. (cultivated strawberry) and milled peat, *Sphagnum* sp. Kings Co. 1961-C.O.G.

★**Mucilago crustacea** Wiggers *in* Prim. Fl. Holsat.:112. 1780.
On leaves, stems and flower stalks of *Fragaria* sp. (cultivated strawberry) and twigs of *Viburnum trilobum* Marsh. (pimbina). Colchester and Halifax Co. 13 Aug. 1979-C.O.G., R.W.D. (DAOM 172763, 177175, det. G.P. White).

★**Mucor abundans** Povah *in* Bull. Torrey Bot. Club 44:292.1917.
From milled peat, *Sphagnum* sp. and on calyx of *Fragaria* sp. (cultivated strawberry). Kings Co. 1961-C.O.G.

Mucor attenuatus Linn. *in* Beitrag zu einer Flora der Mucorineae Marburgs. Flora N.F. 30:176-217. 1935.
From soil. Cumberland Co. 1980-D.B., A.T.

Mucor hiemalis Wehmer *in* Ann. Mycol. 1:39. 1903.
On moose dung, on cap of *Mycena haematopa* Fr. and from crown of *Fragaria* sp. (cultivated strawberry). Colchester, Halifax and Kings Co. 30 July 1931-L.E.W. (W-1434).

Mucor mucedo L. ex Fr. emend. Bref. *in* Bot. Unters. 1:7. 1872.
Common according to A.H.M.-1908 (sub. *Ascophora mucedo*) L.E.W. states there is some doubt what species he had.

★**Mucor plumbeus** Bon. in Abh. Geb. Mykol. 2:109. 1864.
From milled peat, *Sphagnum* sp. Kings Co. 1961-C.O.G.

Mucor rouxii (Calmette) Wehmer *in* Centralbl. Bakt. 6:364. 1900.
Isolated from sheep rumen contents. Cumberland Co. 28 Aug. 1970-D.B., A.T.

Mucronella aggregata (Fr.) Fr. *in* Monogr. Hymen. Suec. 2:280. 1863.
On *Abies balsamea* (L.) Mill. (balsam fir). Colchester Co. 30 Aug. 1933-L.E.W. (W-1640, 1795) (KM-3101, *in* DAOM, K.A.H.).

Mucronoporus circinatus Ell. & Ev. *in* J. Mycol. 5:28. 1889.
Onnia triqueter (Fr.) Imaz. apud S. Ito (1955).
Polyporus circinatus Fr.
Polyporus tomentosus Fr. var. *circinatus* (Fr.) Sart. & Maire.
On *Picea rubens* Sarg. (red spruce). 1975-L.P.M., J.M.M.

Mucronoporus tomentosus Ell. & Ev. *in* J. Mycol. 5:28. 1889.
Coltricia tomentosa (Fr.) Murr.
Onnia tomentosa (Fr.) Karst.
Polyporus tomentosus Fr.
On *Picea glauca* (Moench) Voss (white spruce), *P. rubens* Sarg. (red spruce), *Picea* sp. and on ground. General. 1908-A.H.M. (O-F2221, 2230).

Mutinus caninus (Pers.) Fr. *in* Summa Veg. Scand.:434. 1849.
Mutinus ravenellii (Berk. & Curt.) Fischer.
Around stump of *Abies* sp. (fir). Colchester and Kings Co. 20 July 1931-L.E.W. (W-1087 coll. A.H.S.) (ACAD 8777) (S.F.M.-2, 129 *in* ACAD).

Mycena alcalina (Fr.) Quél. (sensu Schroeter, Kühner, A.H. Smith) *in* Champ. Jura et Vosges:105. 1872.
On debris under hardwoods. Colchester Co. 18 July 1931-A.H.S., L.E.W. (W-657) (KM-2707 *in* DAOM, K.A.H.).

Mycena atrocyanea (Batsch ex Fr.) Gill *in* Hymén. Fr.:271. 1874.
Mycena nigricans Bres.
On soil under conifers. Colchester Co. 2 July 1931-A.H.S., L.E.W. (W-551 as *M. nigricans*).

Mycena borealis A.H. Smith *in* Mycologia 27:586. 1935.
On coniferous wood. Colchester Co. 1931-A.H.S., L.E.W.

Mycena clavicularis (Fr.) Gill. *in* Hymén. Fr.:257. 1874.
On humus under conifers. Colchester Co. 18 July 1931-A.H.S., L.E.W. (W-656, 656a).

Mycena delectabilis (Pk.) Sacc. *in* Syll. Fung. 5:262. 1887.
Hemimycena delectabilis (Pk. sensu A.H.S.) Sing. (1943).
Marasmiellus delectabilis (Pk. sensu A.H.S.) Sing. (1951).
Mycena delectabilis Pk.
Omphalia gracillima (Weinm.) Kummer.
From Kings Co. 7 July 1932-K.A.H. (KM-410 *in* DAOM, fide A.H.S.).

Mycena elegantula Pk. *in* Bull. Torrey Bot. Club 22:199. 1895.
Mycena rubromarginata (Fr.) Quél. var. *laricis* A.H. Smith.
On sticks of *Abies* sp. (fir). Colchester Co. 15 July 1931-A.H.S., L.E.W. (W-635, 690, 690a).

Mycena epipterygia (Scop. ex Fr.) S.F. Gray var. **epipterygia** *in* Nat. Arr. Br. Pl. 1:619. 1821.
On logs of *Tsuga* sp. (hemlock). Colchester Co. 13 July 1931-A.H.S., L.E.W. (W-615, 757).

Mycena epipterygia (Scop. ex Fr.) S. F. Gray var. **lignicola** A.H. Smith *in* North Am. Spec. of *Mycena*:428. 1947.
On logs of *Tsuga* sp. (hemlock). Kings Co. 28 Aug. 1933-K.A.H. (KM-391 *in* DAOM, fide A.H.S.).

Mycena galericulata (Scop. ex Fr.) S.F. Gray *in* Nat. Arr. Br. Pl. 1:619. 1821.
Mycena rugosa (Fr.) Quél.
On decaying hardwoods. Halifax, Kings, Lunenburg and Pictou Co. 1908-A.H.M. (KM-392, 876 *in* DAOM, K.A.H.).

Mycena haematopus (Fr.) Kummer var. **haematopus** *in* Führ. in Pilzkd.:54. 1882.
Mycena cruenta (Fr.) Quél.
On hardwood logs. Colchester and Guysborough Co. 10 Aug. 1931-A.H.S., L.E.W. (KM-4093 *in* DAOM, K.A.H.).

Mycena haematopus (Fr.) Kummer var. **marginata** Lange *in* Dan. Bot. Ark. 1(5):20. 1914.
On hardwood logs. Colchester and Kings Co. 10 Aug. 1931-A.H.S., L.E.W. (W-726a,d,f,g, 826) (KM-395 *in* DAOM, K.A.H.).

Mycena hemisphaerica Pk. *in* Annu. Rep. N.Y. State Mus. 46:104(24). 1893.
Mycena atroumbonata Pk.
On logs of *Fagus* sp. (beech). Colchester Co. 3 Sept. 1931-A.H.S., L.E.W. (W-869).

★ **Mycena inclinata** (Fr.) Quél. *in* Champ. Jura et Vosges:105. 1872.
In wooded ravine. Kings Co. 2 Nov. 1953-K.A.H. (KM-2708 *in* DAOM).

Mycena iodiolens Lundell *in* Uppsal. Hymen-Flora 22:7. 1932.
On moss under conifers. Colchester Co. 24 Aug. 1931-A.H.S., L.E.W. (W-816).

Mycena latifolia (Pk.) Sacc. *in* Syll. Fung. 5:268. 1887.
Under *Abies* sp. (fir) and *Picea* sp. (spruce). Annapolis and Colchester Co. 1913-A.H.M. (L.E.W.-643a, 645, 755, 755a).

Mycena leaiana (Berk.) Sacc. *in* Syll. Fung. 9:38. 1891.
On logs of *Fagus* sp. (beech). Annapolis, Colchester and Kings Co. 1913-A.H.M. (L.E.W.-568) (KM-396, 397, 534, 875, 2709, 5401 *in* DAOM, K.A.H.).

Mycena leptocephala (Pers. ex Fr.) Gill. sensu Ricken *in* Hymén. Fr.:267. 1874.
Under conifers. Colchester Co. 4 Sept. 1931-A.H.S., L.E.W. (W-876).

★**Mycena lilacifolia** (Pk.) A.H. Smith *in* North Am. Spec. of *Mycena*:414. 1947.
On coniferous log. Kings Co. 6 July 1968-K.A.H. (MICH 7658 coll. I.V.H.).

Mycena marginella (Fr.) Quel. *in* Champ. Jura et Vosges:223. 1872, var. **rugosodisca** (Pk.) A.H. Smith *in* North Am. Spec. of *Mycena*:395. 1947.
Omphalia rugosodiscus Pk.
Omphalia marginella (Pers. ex Fr.) Joss. & Maire var. *rugosodisca* (Pk.) Joss. & Sm.
In wooded ravine. Kings Co. 4 Sept. 1938-K.A.H. (KM-1641 *in* DAOM, as *O. rugosodiscus*).

Mycena pelianthina (Fr.) Quél. *in* Champ. Jura et Vosges:102. 1872.
In woods of *Acer* sp. (maple) and *Fagus* sp. (beech). Colchester Co. 10 Aug. 1931-A.H.S., L.E.W. (W-370).

Mycena pura (Pers. ex Fr.) Kummer *in* Führ. in Pilzkd.:57. 1882.
Under *Picea* sp. (spruce). Colchester, Guysborough and Kings Co. 4 July 1931-A.H.S., L.E.W. (W-561, 661a) (KM-399, 2710, 4092 *in* DAOM, K.A.H.).

Mycena rorida (Scop. ex Fr.) Quél. *in* Champ. Jura et Vosges:108. 1872.
Under conifers. Colchester Co. 16 July 1931-A.H.S., L.E.W. (W-516a, 642).

Mycena rosella (Fr.) Kummer *in* Führ. in Pilzkd.:55. 1882.
Under conifers. Colchester and Kings Co. 19 Aug. 1931-A.H.S., L.E.W. (W-694) (KM-933 *in* DAOM, K.A.H.).

Mycena sanguinolenta (Alb. & Schw. ex Fr.) Kummer *in* Führ. in Pilzkd.:54. 1882.
On decayed wood and debris, on mossy hummocks of sphagnum bogs. Colchester and Kings Co. 27 June 1931-A.H.S., L.E.W. (W-505) (KM-400 *in* DAOM, K.A.H.).

Mycena strobilinoidea Pk. *in* Annu. Rep. N.Y. State Mus. 45:23. 1893.
On needles of *Pinus* sp. (pine). Annapolis and Kings Co. 15 Oct. 1952-K.A.H. (KM-1594, 1597 *in* DAOM).

Mycena stylobates (Pers. ex Fr.) Kummer *in* Führ. in Pilzkd.:108. 1871.
On fallen leaves of hardwoods. Colchester Co. 23 July 1931-A.H.S., L.E.W. (W-691).

Mycena subcaerulea (Pk.) Sacc. *in* Syll. Fung. 5:263. 1887.
Mycena cyaneobasis Pk.
On hardwood debris. Colchester Co. 20 Aug. 1931-A.H.S., L.F.W. (W-840).

★**Mycena subsanguinolenta** A.H. Smith *in* Mycologia 31:280. 1939.
On moss in coniferous wood. Hants Co. 19 Oct. 1958-K.A.H. (KM-5402 *in* DAOM).

Mycena tenax A.H. Smith *in* Mycologia 28:414. 1936.
Under conifers. Colchester Co. 3 Sept. 1931-A.H.S., L.E.W. (as *Mycena quiniaultensis* Kauff., A.H.S.-864).

Mycena urania (Fr.) Quél. *in* Champ. Jura et Vosges:243. 1872.
Under *Abies* sp. (fir) and *Picea* sp. (spruce). Colchester Co. 29 June 1931-A.H.S., L.E.W. (W-518, 518a,b).

Mycena vitilis (Fr.) Quél. sensu Lange *in* Champ. Jura et Vosges:106. 1872.
Mycena filopes (Bull. ex Fr.) Quél.
On humus and conifer needles. On mossy areas in hardwood. Kings Co. 14 Aug. 1931-K.A.H. (KM-398 *in* DAOM, as *M. plicosa* (Fr.) Gill. fide A.H.S.).

Mycena vulgaris (Pers. ex Fr.) Kummer *in* Führ. in Pilzkd.:55. 1882.
Under *Picea* sp. (spruce). Colchester and Kings Co. 18 Aug. 1931-A.H.S., L.E.W. (W-534) (KM-401 *in* DAOM, K.A.H.).

Mycenitis alliaceus (Fr.) Earle *in* Bull. N.Y. Bot. Gard. 5:414. 1909.
Marasmius alliaceus (Fr.) Fr.
From Halifax Co. 1881-J.S. (A.H.M.).

★**Mycoacia alboviride** (Morg.) L.W. Miller & Boyle *in* Univ. Iowa Stud. Nat. Hist. 18:43. 1943.
Oxydontia alboviride (Morg.) L.W. Miller.
On stump of *Picea* sp. (spruce). Kings Co. 23 Oct. 1952-D.W.C. (KM-1920 *in* DAOM det. K.A.H.).

Mycocalicium pallescens (Nyl.) Vain. *in* Etud. Lich. Bres. 2.1890.
On decorticated wood of *Betula* sp. (birch). Colchester Co. 29 Aug. 1931-L.E.W. (W-1668 det. J.H.L.).

Mycocentrospora acerina (Hartig) Deighton *in* Taxon 21:716. 1972.
Centrospora acerina (Hartig) Newhall.
On leaves of *Viola tricolor* L. var. *hortensis* DC. (pansy). Kings Co. 21 Nov. 1957-K.A.H.

★**Mycoleptodonoides pusillum** (Fr.) Harrison *in* Ainworth, Sparrow & Sussman, The Fungi 4B:388. 1973.
Steccherinum pusillum (Brot.) Banker.
From Kings Co. 18 Sept. 1959-K.A.H. (ACAD 4609).

★**Mycosphaerella brassicicola** (Fr. ex Duby) Lindau *in* Engler & Prantl, Nat. Pflanzenfam. 1(1):424. 1897.
On stems of *Brassica oleracea* L. var. *capitata* L. (cabbage). Kings Co. 20 Aug. 1973-R.W.D., C.O.G.

Mycosphaerella citrullina (C.O. Sm.) Gross. *in* N.Y. Agric. Exp. Stn. Tech. Bull. 9:226. 1909.
Stat. conid. *Ascochyta citrullina* (Chester) C.O. Sm.
On fruit of *Cucurbita maxima* Duchesne (squash). Kings Co. 12 Feb. 1952-K.A.H.

Mycosphaerella colorata (Pk.) House *in* Bull. N.Y. State Mus. 233-234:26. 1921.
On leaves of *Kalmia angustifolia* L. (lambkill). Colchester Co. 22 July 1929-L.E.W. (W-105, 1617).

Mycosphaerella coptis (Schw.) House *in* Bull. N.Y. State Mus. 233-234:27. 1921.
Stat. conid. *Septoria coptis* Berk. & Curt.
On leaves of *Coptis trifolia* (L.) Salisb. var. *groenlandica* (Oeder) Hulten (goldthread). Halifax Co. 6 July 1929-L.E.W. (W-32).

Mycosphaerella effigurata (Schw.) House *in* Bull. N.Y. State Mus. 233-234:27. 1921.
On foliage of *Fraxinus americana* L. (white ash). Kings Co. 12 Sept. 1944-R.M.L.

Mycosphaerella fragariae (Tul.) Lindau *in* Engler & Prantl, Nat. Pflanzenfam. 1(1):424. 1897.
Stat. conid. *Ramularia brunnea* Pk.
Ramularia tulasnei Sacc.
Leaf spot of *Fragaria* sp. (cultivated strawberry). General. 29 May 1925-J.F.H.

Mycosphaerella gaultheriae (Cke. & Ell.) House *in* Bull. N.Y. State Mus. 233-234:27. 1921.
On leaves of *Gaultheria procumbens* L. (teaberry). Kings Co. 28 May 1925-J.F.H.

Mycosphaerella grossulariae (Auersw.) Lindau *in* Engler & Prantl, Nat. Planzenfam. 1(1):424. 1897.
Mycosphaerella ribis (Fckl.) Feltg.
Stat. conid. *Septoria ribis* Desm.
On *Ribes grossularia* L. (gooseberry) and *R. rubrum* L. (red currant). General. 7 Sept. 1926-W.K.M.

Mycosphaerella pinodes (Berk. & Blox.) Vestergr. *in* Bih. K. Sven. Vetenok. Akad. Handl. 22(3, 6):15. 1896.
Stat. conid. *Ascochyta pinodes* (Berk. & Blox.) L.K. Jones
Mycosphaerella blight of *Pisum sativum* L. (pea). General. 31 July 1925-J.F.H.

Mycosphaerella populicola G.E. Thompson *in* Phytopathology 31:251. 1941.
On *Populus balsamifera* L. (balsam poplar). 1975-J.P.M., J.M.M.

★**Mycosphaerella populorum** G.E. Thompson *in* Phytopathology 31:246-251. 1941.
On *Populus tremuloides* Michx. (trembling aspen). Kings Co. 2 Oct. 1951-D.W.C.

Mycosphaerella punctiformis (Pers. ex Fr.) Starb. *in* Bih. K. Sven. Vetensk. Akad. Handl. 15 (3, 2):9. 1889.
On *Fagus grandifolia* Ehrh. (beech). Colchester and Kings Co. 25 June 1926-L.E.W. (P372).

Mycosphaerella rosicola B.H. Davis *in* Mycologia 30:296. 1938.
Stat. conid. *Cercospora rosicola* Pass.
On *Rosa* sp. (wild rose). 1925-J.F.H.

Mycosphaerella rubi Roark *in* Phytopathology 11:329. 1921.
Stat. conid. *Septoria rubi* Westend.
On *Rubus* spp. (dewberry, blackberry, raspberry). Kings Co. 24 July 1925-J.F.H.

Mycosphaerella sarraceniae (Schw. ex Fr.) P. Henn. *in* Verh. Bot. Vereins Prov. Brandenb. 40:157. 1898.
On *Sarracenia purpurea* L. (pitcher plant). Colchester Co. 10 Aug. 1933-L.E.W. (W-1626).

Mycosphaerella sentina (Fr.) Schroet. *in* Cohn, Krypt. Fl. Schles. 3(2):334. 1894.
On *Pyrus communis* L. (pear). Kings Co. 1924-J.F.H.

★**Mycosphaerella tussilaginis** (Rehm) Lindau *in* Engler & Prantl, Nat. Pflanzenfam. 1(1):424. 1897.
Sphaerella tussilaginis Rehm.
Stat. conid. *Ramularia brunnea* Pk.
On leaves of *Tussilago farfara* L. (coltsfoot). Kings Co. 19 Sept. 1951-K.A.H., D.W.C.

Mycosphaerella ulmi Kleb. *in* Z. Pflanzenkr. 12:257. 1902.
Stat. conid. *Phleospora ulmi* (Fr.) Wallr.
On *Ulmus americana* L. (Americana elm). Annapolis Co. 13 Sept. 1948-J.F.H.

Mycosphaerella virgaureae Krieg. *in* Ann. Mycol. 9:216. 1911.
Sphaerella virgaureae Krieg.
Stat. conid. *Cercospora virgaureae* Thüm.
Cercosporella virgaureae (Thüm.) Allesch.
On *Solidago* sp. (goldenrod). Colchester Co. 19 June 1933-L.E.W. (W-1522).

★**Myriellina** sp.
Causing storage rot of fruit of *Pyrus communis* L. (pear) in closed container in atmosphere of 2% CO_2 and 13% of O_2. Kings Co. 30 April 1975-C.O.G. (I.M.I. 199724).

★**Myrothecium cinctum** (Cda.) Sacc. *in* Syll. Fung. 4:751. 1886.
On twig of *Malus pumila* Mill. (apple). Kings Co. 3 May 1976-C.O.G.

Myrothecium roridum Tode ex Fr. *in* Syst. Mycol. 3:217. 1829.
On calyx of *Fragaria* sp. (cultivated strawberry), roots of *Lycopersicon esculentum* Mill. (tomato) and in cankered wood of *Prunus avium* L. (sweet cherry). Annapolis and Kings Co. 31 May 1960-C.O.G.

Myrothecium sp.
From fruit of *Vaccinium macrocarpon* Ait. (cranberry). Inverness Co. 12 Nov. 1969-C.O.G. (DAOM 153473).

Myxosporium corticola Edg. *in* Ann. Mycol. 6:51. 1908.
See *Cryptosporiopsis corticola* (Edg.) Nannf.

Myzocytium anomalum Barron *in* Can. J. Microbiol. 22:760. 1976.
In association with nematodes from compost and dung (cow, hog, horse). Kings Co. 1980-M.E.A.

Myzocytium humicola Barron & Percy *in* Can. J. Bot. 53:1306. 1975.
In association with nematodes from compost and dung (cow, horse). Kings Co. 1980-M.E.A.

Myzocytium papillatum Barron *in* Can. J. Microbiol. 22:752. 1976.
In association with nematodes from compost and dung (cow). Kings Co. 1980-M.E.A.

Naematoloma capnoides (Fr.) Karst. *in* Hättsvampar 1:495. 1879.
Agaricus capnoides Fr.
Hypholoma capnoides (Fr. ex Fr.) Kummer.
On coniferous wood. Halifax and Kings Co. 1908-A.H.M. (KM-4155 *in* DAOM, K.A.H.).

★**Naematoloma ericaeum** (Pers. ex Fr.) Smith *in* Mycologia 43:485. 1951.
Agaricus ericaeus Pers. ex Fr. (1821).
Coprinus ericaeus Kummer (1871).
Geophila ericaea Quél. (1886).
Psilocybe ericaea Quél. (1873).
Stropharia subumbonatescens Murr. (1941).
From Guysborough Co. 2 Sept. 1957-K.A.H. (KM-4137 *in* DAOM) (A rare fungus in North America, fide A.H.S.).

Naematoloma fasciculare (Huds. ex Fr.) Karst. *in* Hättsvampar 1:496. 1879.
Hypholoma fasciculare (Huds. ex Fr.) Kummer.
On decaying logs and stumps. Pictou Co. 1908-A.H.M.

Naematoloma sublateritium (Fr.) Karst. *in* Hättsvampar 1:495. 1879.
Hypholoma perplexum (Pk.) Sacc.
Hypholoma sublateritium (Fr.) Quél.
At base of old stumps, especially *Acer* sp. (maple) and *Fagus* sp. (beech). General. 1908-A.H.M. (KM-318, 963, 1428, 1559, 4156, 4157 *in* DAOM, K.A.H.). (L.E.W.-541).

Nais inornata Kohlm. *in* Nova Hedwigia 4:409. 1962.
On *Spartina alterniflora* Loisel. (cord-grass) and culm material. Kings Co. 9 Nov. 1975-G.J.B., D.W.G.

Naucoria nucea (Bolt.) Sacc. *in* Syll. Fung. 5:839. 1887.
Reported as *Agaricus nuceus* Bolt. under conifers. Halifax Co. 1880-J.S. (A.H.M.) (not sufficiently well known to be recognized, according to A.H.S.).

Nectria cinnabarina (Tode ex Fr.) Fr. *in* Summa Veg. Scand.:388. 1849.
Stat. conid. *Tubercularia vulgaris* Tode.
Common on wood hosts including *Acer* spp. (maple), *Betula* spp. (birch), *Caragana arborescens* Lam. (Siberian pea), *Castanea dentata* Tode ex Fr. (chestnut), *Juglans cinerea* L. (butternut), *Ligustrum amurense* Carr. (privet), *Malus pumila* Mill. (apple), *Prunus* spp. (stone fruits), *Pyrus communis* L. (pear), *Rhododendron* spp., *Sambucus canadensis* L. (elder), *Vaccinium corymbosum* L. (highbush blueberry), and others. (See Conners Can. Dep. Agric. Publ. 1251. 1967). General. 1908-A.H.M. (L.E.W.-14) (O-4560, 4561).

Nectria coccinea Fr. sensu Wollenw. *in* Summa Veg. Scand.:388. 1849, var. **faginata** Lohm., Wats. & Ayers *in* Lloydia 6:100-103. 1943.
On *Acer* sp. (maple), *Betula* sp. (birch), *Fagus grandifolia* Ehrh. (American beech) and *Malus* sp. (apple). General. ca.1920. (O-2284-L.E.W.). This fungus in association with the scale insect *Cryptococcus fagi* (Baer.) is the cause of beech canker, resulting in death of trees throughout eastern Canada and northeastern U.S.A.

Nectria coryli Fckl. *in* Fungi Rehn. Exs., Suppl. 1:1582. 1865.
On *Salix* sp. (willow). Colchester Co. 13 July 1931-L.E.W. (W-1003).

Nectria ditissima Tul. *in* Sel. Fung. Carp. 3:73. 1865.
On *Fagus grandifolia* Ehrh. (beech). 1975-L.P.M., J.M.M.

Nectria episphaeria (Tode ex Fr.) Fr. *in* Summa Veg. Scand.:388. 1849.
Stat. conid. *Fusarium aquaeductuum* Lagerh. var. *medium* Wollenw.
On old fruiting bodies or stromata of various pyrenomycetes, *Dermatea*, etc., on old stump and stems. Colchester, Kings and Pictou Co. 26 June 1926-L.E.W. (P25a, W-308b, 386a, 530).

Nectria fuckeliana Booth *in* Commonw. Mycol. Inst. Mycol. Pap. 73:56. 1959.
On *Abies balsamea* (L.) Mill. (balsam fir) and *Picea glauca* (Moench) Voss (white spruce). Richmond Co. Aug. 1931-R.E.B. (I.M.I. 52082).

Nectria galligena Bres. *in* Strasser, Verh. K. Zool. Bot. Ges. Wien.:413. 1901.
Stat. conid. *Cylindrocarpon heteronema* (Berk. & Br.) Wollenw.
Cylindrocarpon mali (Allesch.) Wollenw.
On *Acer saccharum* Marsh. (sugar maple), *Betula lutea* Michx. f. (yellow birch), *Corylus* sp. (hazelnut), *Fagus grandifolia* Ehrh. (beech), *Malus pumila* Mill. (apple), *Populus tremuloides* Michx. (poplar), *Salix* sp. (willow) and *Sorbus* sp. (mountain ash). General. 2 Sept. 1925-J.F.H.

Nectria gliocladioides Smalley & Hansen *in* Mycologia 49:529-533. 1957.
Stat. conid. *Gliocladium roseum* (Link) Bain.
On *Fragaria* sp. (cultivated strawberry). Kings Co. 9 July 1962-S.J.H., C.O.G. (DAOM 88201).

Nectria haematococca Berk. & Br. *in* J. Linn. Soc. Bot. 14:116. 1873.
Stat. conid. *Fusarium solani* (Mart.) Sacc.
On *Azalea* sp. (homothallic strain DAOM 145923), *Fragaria* sp. (cultivated strawberry), general as root-rot organism of vegetable and ornamental plants and from polluted water at 24-meter depth in bored well. July 1943-J.F.H. (DAOM 169249).

★**Nectria inventa** Pethybr. *in* Trans. Br. Mycol. Soc. 6:104-107. 1919.
Stat. conid. *Verticillium tenerum* Nees.
Acrostalagmus cinnabarinus Cda.
Verticillium state on seed piece of *Solanum tuberosum* L. (potato). Kings Co. 15 May 1963-C.O.G., W.B.K.

Nectria lactea Ell. & Morg. *in* Seaver, Mycologia 1:tab. 5, fig. 5. 1909.
On myxomycete sporangia and on wood upon which they are growing. Colchester Co. 17 July 1931-L.E.W. (W-1071, 1071a leg. A.H.S.).

Nectria peziza (Tode ex Fr.) Fr. *in* Summa. Veg. Scand.:388. 1849.
On decayed wood and fungi such as *Polyporus* sp. Colchester Co. 24 July 1929-L.E.W. (W-100, 1064, 1065).

Nectria pithoides Ell. & Ev. *in* Proc. Acad. Nat. Sci. Phila. 42:247. 1890.
On *Betula* sp. (birch). Colchester Co. 16 June 1926-L.E.W. (P73a, W-1631).

Nectria sanguinea (Bolt. ex Fr.) Fr. *in* Summa Veg. Scand.:388. 1849.
On stump of *Pinus* sp. (pine). Colchester Co. 26 Aug. 1931-L.E.W. (W-1411).

Nematoctonus leiosporus Drechsler *in* Phytopathology 31:779. 1941.
In association with nematodes from dung (cow) and greenhouse soil. Kings Co. 1980-M.E.A.

Nematoctonus leptosporus Drechsler *in* J. Wash. Acad. Sci. 33:188. 1943.
In association with nematodes from soil in deciduous woods. Kings Co. 1980-M.E.A.

Nematoctonus robustus Jones *in* Trans. Br. Mycol. Soc. 47:57. 1964.
In association with nematodes from dung (chicken). Kings Co. 1980-M.E.A.

Nematoctonus tyloporus Drechsler *in* Phytopathology 31:779. 1941.
In association with nematodes from soil in deciduous woods. Kings Co. 1980-M.E.A.

Nematoctonus sp.
In association with nematodes from farmyard soil. Kings Co. 1980-M.E.A. (*N. bicatenulatus* nom. prov. Plate XXV in MSc Thesis, Acadia Univ.).

Nematoctonus sp.
In association with nematodes from compost, dung (cow, hog, horse) and greenhouse soil. Kings Co. 1980-M.E.A. (*N. reniformis* nom. prov. Plate XXVIII in MSc. Thesis, Acadia Univ.).

Nematogonum ferrugineum (Pers.) Hughes *in* Can. J. Bot. 36:789. 1958.
Gonatorrhodiella highlei A.L. Sm. emend. Ayers.
Nematogonum aurantiacum Desm.
In association with *Nectria coccinea* (Pers. ex Fr.) Fr. and the woolly beach scale, *Cryptococcus fagi* (Baer.) on diseased American beech, *Fagus grandifolia* Ehrh. General. 1930-John Ehrlich (Mycologia 34:705. 1941) (L.E.W. 35, 1042, 1341).

★**Neobulgaria pura** (Fr.) Petrak *in* Ann. Mycol. 19:45. 1921.
Ascotremella turbinata Seav.
On wood and bark of *Acer* sp. (maple), *Betula* sp. (birch), *Fagus* sp. (beech) and unidentified wood. Kings Co. 22 Oct. 1952-K.A.H., D.W.C. (DAOM 111968) (KM-1691 *in* DAOM as *A. turbinata*).

Neofabraea malicorticis Jacks. *in* Rep. Ore. Exp. Stn. 12:187. 1913.
Neofabraea perennans Kienh. (1939).
Pezicula malicorticis (Jacks.) Nannf. (1932).
On fruit and wood of *Malus pumila* Mill. (apple). Kings Co. 17 June 1960-C.L.L., R.G.R.

Neolecta irregularis (Pk.) Korf & Rogers *in* Phytopathology 21:204. 1971.
Ascocoryneum irregulare (Pk.) Ito & Imai.
Geoglossum irregulare Pk.
Mitrula vitellina (Bres.) Sacc.
Mitrula irregularis (Pk.) Durand.
Spragueola irregularis (Pk.) Nannf.
On damp soil. General. 15 Sept. 1931-K.A.H. (KM-1025, 1065, 1547 *in* DAOM) (DAOM 1065, 1547) (MICH 7996, 8052, 8196, 8254, 12646) (ACAD 1025).

Neurospora sitophila Shear & Dodge *in* J. Agric. Res. 34:1026. 1927.
Stat. conid. *Monilia sitophila* (Mont.) Sacc.
On veneer of *Betula* sp. (birch), decaying roots of *Daucus carota* L. var. *sativa* DC. (carrot) and *Fragaria* sp. (cultivated strawberry). Kings Co. 1939-J.F.H. det. I.L.C.

★**Nigrospora sphaerica** (Sacc.) Mason *in* Trans. Br. Mycol. Soc. 12:158. 1927.
From leaf of *Fragaria* sp. (cultivated strawberry) and glumes of *Hordeum vulgare* L. (barley). Kings Co. Sept. 1967-C.O.G.

Nolanea coelestina Fr. *in* Epicr. Syst. Mycol.:158. 1838, var. **violacea** Kauff. *in* Rep. Mich. Acad. Sci. 10:67. 1908.
Leptonia coelestina (Fr.) Orton (1960).
On bare soil under *Fagus* sp. (beech). Colchester Co. 17 July 1931-A.H.S., L.E.W. (W-647).

Nolanea mammosa (L. ex Fr.) Quél. *in* Champ. Jura et Vosges 1. tab 6. 1872.
Rhodophyllus mammosus (Fr.) Quél.
On humus under hardwood. Colchester Co. 22 Aug. 1931-A.H.S., L.E.W. (W-811).

Nolanea murraii Berk. & Curt. *in* Ann. Mag. Nat. Hist. 4:290. 1859.
Agaricus cuspidatus Pk.
Entoloma cuspidatum (Pk.) Sacc.
Entoloma murraii (Berk. & Curt.) Sacc.
Rhodophyllus murraii (Berk. & Curt.) Sing.
On wet humus and sphagnum moss under hardwoods. Colchester and Hants Co. 20 July 1931-A.H.S., L.E.W. (W-673, 673a) (KM-267, 2618 *in* DAOM, K.A.H.).

Nolanea pascua (L. ex Fr.) Quél. *in* Champ. Jura et Vosges:122. 1873.
Nolanea pascua (L. ex Fr.) Kummer (Sing. 1975).
Rhodophyllus pascuus (L. ex Fr.) Quél. sensu Lange.
In mixed woods. Annapolis, Hants, Halifax and Kings Co. 21 Aug. 1932-K.A.H. (KM-405, 406, 925, 4090, 4091 *in* DAOM) (K.R.S.Q.-62 coll. K.A.H. *in* ACAD).

• **Nolanea quadrata** Berk. & Curt. *in* Ann. Mag. Nat. Hist. 4:291. 1859.
Entoloma salmoneum (Pk.) Sacc.
Rhodophyllus salmoneus (Pk.) Sing.
On humus under hardwoods. Colchester, Guysborough, Halifax and Hants Co. 26 July 1931-K.A.H. (KM-274, 4129, 4130 *in* DAOM) (L.E.W.-786).

Nothophacidium abietinellum (Dearn.) Reid & Cain *in* Mycologia 54:195. 1962.
Phacidium abietinellum Dearn.
Nothophacidium phyllophilum (Pk.) Smerlis (Can. J. Bot. 44:563. 1966).
On *Abies balsamea* (L.) Mill. (balsam fir). 1975-L.P.M., J.M.M.

★**Nummularia discincola** (Schw. ex Fr.) Cke. *in* Grevillea 12:6. 1883.
Hypoxylon discretum (Schw.) Berk.
Nummularia discreta (Schw.) Tul.
On wood of *Malus pumila* Mill. (apple). Digby Co. 28 April 1953-K.A.H., D.W.C.

Nyssopsora clavellosa (Berk.) Arth. *in* North Am. Flora 7:180. 1912.
On *Aralia nudicaulis* L. (wild sarsaparilla). General. 1913-W.P.F. (O-1881).

★**Odontia alutacea** (Fr.) Bourd. & Galz. *in* Hymén. Fr.:422. 1927.
On *Abies balsamea* (L.) Mill. (balsam fir) and *Picea* sp. (spruce). Kings Co. 7 Nov. 1954-K.A.H. (KM-3067 *in* DAOM det. R.M.).

Odontia barba-jovis (Bull. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:528. 1838.
On *Abies balsamea* (L.) Mill. (balsam fir). Colchester Co. 5 July 1935-L.E.W. (W-1719 pr.p.) det. R.F.C.

Odontia bicolor (Alb. & Schw. ex Fr.) Bres. *in* Ann. Mycol. 1:87. 1903.
On *Abies balsamea* (L.) Mill. (balsam fir), *Acer* sp. (maple), *Betula lutea* Michx f. (yellow birch), *Juniperus* sp. (juniper), *Picea* spp. (spruce) and *Tsuga* sp. (hemlock). General. 19 July 1929-L.E.W., K.C. (W-1757, 1757a,b, fide R.F.C.) (O-F5139, 5480) (KM-2834, 3068 *in* DAOM, K.A.H.).

Odontia crustosa (Pers.) Quél. *in* Flore Mycol. Fr.:436. 1888.
On *Abies balsamea* (L.) Mill. (balsam fir), *Acer rubrum* L. (red maple), *Alnus* (alder), *Betula* sp. (birch), *Fagus grandifolia* Ehrh. (beech), *Picea* sp. (spruce) and *Sambucus pubens* Michx. (red-berried elder). General. 1 July 1931-L.E.W., K.C. (W-349, 483, 1289) (O-F5206) (KM-2835, 2836, 3063, 3099 *in* DAOM, K.A.H.).

Odontia fimbriata (Pers. ex Fr.) *in* Epicr. Syst. Mycol.:529. 1838.
Steccherinum fimbriatum (Pers. ex Fr.) Erikss.
On *Populus* sp. (poplar) and *Prunus virginiana* L. (choke cherry). Colchester and Halifax Counties. 1881-J.S. (L.E.W.-1074) (KM-3062 *in* DAOM, K.A.H.).

Odontia fusco-atra (Fr.) Bres. *in* Atti Accad. Rovereto, Sér. 3, 3:95. 1897.
On *Fagus grandifolia* Ehrh. (beech) and *Populus* sp. (poplar). Colchester Co. July 1935-L.E.W. (W-1731 fide H.S.J.).

Odontia lactea Karst. *in* Bidr. Finl. Nat. Folk 37:239. 1882.
On *Abies* sp. (fir) and *Betula* sp. (birch). Colchester and Kings Co. 1950-L.E.W.

(W-1641, 1719, 1719a-c, 1737, 1779) (O-F5207, 5210, 5211) (KM-3064, 3065 *in* DAOM, K.A.H.).

Odontia spathulata (Schw. ex Fr.) Rea *in* Br. Basidiomyc.:648. 1922.
On *Abies* sp. (fir). Colchester and Kings Co. 1950-L.E.W. (W-1101-1201, 1730) (O-F5485, 5490, 5491).

★**Odontia stipata** (Fr.) Quél. *in* Flore Mycol. Fr.:435. 1888.
On *Abies balsamea* (L.) Mill. (balsam fir). Kings Co. 9 Oct. 1953-K.A.H. (KM-2838 *in* DAOM det. R.M.).

Oidiodendron tenuissimum (Pk.) Hughes *in* Can. J. Bot. 36:790. 1958.
Isolated from soil. Cumberland Co. 1971-D.B. et al.

Oidiodendron truncatum Barron *in* Can. J. Bot. 40:602. 1962.
Isolated from soil. Cumberland Co. 1971-D.B. et al.

Oidium conspersum (Link) Linder *in* Lloydia 5:176. 1942.
Rhinotrichum repens Preuss.
Sporotrichum conspersum (Link) Fr.
On decayed wood. Colchester and Kings Co. 20 July 1929-L.E.W. (W-206 det. D.L.L.) (KM-2133 *in* DAOM, K.A.H. det. S.J.H.).

Oidium sp. (*Erysiphe cichoracearum* DC. ex Mérat.).
Powdery mildew on leaves of *Myosotis sylvatica* Hoffm. (forget-me-not). Halifax Co. 14 Aug. 1968-C.O.G.

Olpidiopsis saprolegniae Cornu *in* Ann. Sci. Nat. 15:145. 1872.
Parasite on *Achlya treleaseana* (Humphrey) Kauffman. 1913-C.L.M.

Olpidium brassicae (Woron.) Dang. *in* Ann. Sci. Nat. Bot. 4:327. 1886.
Occurs on the roots of many host plants. Aug. 1980-D.J.S.B. (Fungi Canadenses:176).

Ombrophila clavus (Alb. & Schw.) Cke. *in* Grevillea 8:84. 1879.
On dead wood. Kings Co. 23 Aug. 1931-K.A.H. (KM-1157, 1158, 1159 *in* DAOM).

Omphalina chrysophylla (Fr.) Murr. var. **chrysophylla** *in* North Am. Flora 9:346. 1916.
Omphalia chrysophylla (Fr.) Kummer.
On coniferous wood. Colchester and Kings Co. 20 July 1931-A.H.S., L.E.W. (W-677) (Harrison 2043 *in* DAOM, K.A.H.; Mycologia 62:21. 1970).

Omphalina ericetorum (Fr. ex Fr.) M. Lange *in* Macromycetes, Pt. 2, Greenland Agaricales, Medd. Gronl. 147:25. 1955.
Omphalia ericetorum (Fr. ex Fr.) Lundell.
Omphalia umbellifera (L. ex Fr.) Kummer.
Omphalina umbellifera (L. ex Fr.) Quél.
From Halifax and Lunenburg Co. 1881-J.S. (A.H.M.) as *Omphalia umbellifera.*

Omphalina oniscus (Fr.) Gill. *in* Hymén. Fr.:297. 1874.
On sandy bank among moss. Colchester Co. 3 July 1931-A.H.S., L.E.W.

★**Omphalotus olearius** (DC. ex Fr.) Sing. *in* Mycologia 38:283. 1946.
Clitocybe illudens Schw.
Clitocybe olearia (DC. ex Fr.) Maire.
Under *Quercus* sp. (oak). Kings Co. 10 Aug. 1954-K.A.H. (KM-5144, 5281 *in* DAOM as *C. illudens*).

Onygena equina (Willd.) Pers. ex Fr. *in* Syst. Mycol. 3:206. 1829.
On decaying hooves and horns of horses and cattle. 1913-A.H.M.

Oospora pustulans Owen & Wakefield *in* Bull. Misc. Inf. Kew. 1919:297. 1919.
On *Solanum tuberosum* L. (potato). Kings Co. 20 May 1933-W.K.M.

Ophioblus acuminatus (Sow. ex Fr.) Duby *in* Rabenhorst, Herb. Mycol., ed 2:57. 1856.
On *Cirsium* sp. (thistle). Colchester and Kings Co. 26 June 1926-L.E.W. (W-1544, 3299, A.R.P.) (DAOM 121749).

Ophiobolus graminis Sacc. *in* Rev. Mycol. 3(11):45. 1881.
See *Gaeumannomyces graminis* (Sacc.) v. Arx & Oliver var. *tritici* Walker.

Ophiobolus porphyrogonus (Tode) Sacc. *in* Syll. Fung. 2:338. 1883.
On *Corallorhiza maculata* Raf. (spotted coral-root) and *Spiraea* sp. Colchester and Kings Co. 25 June 1926-L.E.W. (P249b, W-269) (See note in Mycotaxon 11(1):55, 114. 1980 on classification of this species).

Orbilia inflatula (Karst.) Karst. *in* Not. Soc. Fauna Flora Fenn. 11:248. 1871.
Orbilia auricolor (Bloxam ex Berk.) Sacc.
On *Fagus grandifolia* Ehrh. (beech). Colchester Co. 20 Aug. 1935-L.E.W. (W-1666 det. E.K.C.).

Orbilia luteo-rubella (Nyl.) Karst. *in* Not. Soc. Fauna Flora Fenn. 11:248. 1871.
On decayed wood. Colchester Co. July 1929-L.E.W. (W-45 det. E.K.C.).

Orbilia xanthostigma (Fr.) *in* Summa Veg. Scand.:357. 1849.
Orbilia leucostigma Fr. var. *xanthostigma* (Fr.) Rehm.
On *Polyporus betulinus* (Bull.) Fr. Colchester Co. 30 July 1929-L.E.W. (W-142 as *O. leucostigma* var. *xanthostigma*).

Osteina obducta (Berk.) Donk *in* Schweiz. Z. Pilzkd. 44:87. 1966.
Grifola ossea (Kalchbr.) Pilát.
Polyporus obductus Berk.
Polyporus osseus Kalchbr.
Polyporus zelleri Murr.
From Pictou Co. 1908-A.H.M.

Otidea grandis (Pers.) Rehm *in* Rabenhorst, Kryptogamenfl. Pilze, 4:1023. 1894.
Scodellina grandis (Pers.) Seav.
From Annapolis and Kings Co. 16 Aug. 1931-K.A.H. (KM-1198, 1200 *in* DAOM).

Otidea leporina (Batsch) Fckl. *in* Symb. Mycol.:329. 1869-70.
Scodellina leporina (Batsch) S.F. Gray.
On duff of *Picea* sp. (spruce) and other decayed wood. Colchester and Kings Co. 18 Aug. 1931-L.E.W. (W-1344, 1344a,b leg. A.H.S.). (KM-2199 *in* DAOM, K.A.H.).

Oudemansiella radicata (Relh. ex Fr.) Sing. *in* Ann. Mycol. 34:333. 1936.
Agaricus radicatus Relh. ex Fr.
Collybia radicata (Fr.) Quél.
On dead wood and on soil. General. 1881-J.S. (A.H.M.) (KM-242 *in* DAOM, K.A.H.) (L.E.W.-129 coll. A.R.P., 589).

Oxyporus corticola (Fr.) Ryv. *in* Persoonia 7:19. 1972.
Poria corticola (Fr.) Cke.
On *Populus* sp. (poplar) and deciduous wood. Colchester Co. 29 June 1931-L.E.W. (W-314).

Oxyporus late-marginatus (Dur. & Mont. ex Mont.) Donk *in* Persoonia 4:342. 1966.
Chaetoporus ambiguus (Bres.) Bond. & Sing.
Poria ambigua Bres.
Poria late-marginata (Dur. & Mont.) Cke.
On *Populus* sp. (poplar) and inside old stump. Colchester Co. 4 Sept. 1931-L.E.W. (W-1470, 1586).

Oxyporus populinus (Schum. ex Fr.) Donk *in* Meded. Bot. Mus. Utrecht 9:204. 1933.
Fomes connatus (Weinm.) Gill.
On *Acer pensylvanicum* L. (striped maple), *A. rubrum* L. (red maple), *A. saccharum* Marsh. (sugar maple), *Aesculus hippocastanum* L. (horse chestnut), *Betula lutea* Michx. f. (yellow birch), *Fagus grandifolia* Ehrh. (beech) and species of *Acer* and *Malus* (apple). General. 27 July 1929-L.E.W. (W-158) (KM-52, 52b, 107 *in* DAOM) (O-F5475).

Pachybasium niveum Rostr. *in* Dan. Bot. Ark. 2:41. 1916.
Isolated from forest soil. Cumberland Co. 1971-D.B. *et al.*

★**Paecilomyces bacillisporus** Onions & Barron *in* Commonw. Mycol. Inst. Mycol. Pap. 107:11. 1967.
From stem of *Pisum sativum* L. (garden pea). Kings Co. 10 Aug. 1970-C.O.G.

Paecilomyces carneus (Duché & Heim) Brown & Smith *in* Trans. Br. Mycol. Soc. 40:70. 1957.
Isolated from soil. Cumberland Co. 1971-D.B. *et al.*

Paecilomyces elegans (Cda.) Mason & Hughes apud Hughes *in* Commonw. Mycol. Inst. Mycol. Pap. 45:27. 1951.
Mariannaea elegans (Cda.) Samson var. *elegans* (Stud. Mycol. 6:75. 1974).
From soil. Cumberland Co. 1980-D.B., A.T.

★**Paecilomyces inflatus** (Burnside) Carmichael *in* Can. J. Bot. 40:1148. 1962.
From roots of *Fragaria* sp. (cultivated strawberry). Cumberland Co. 26 May 1971-C.O.G.

Paecilomyces lilacinus (Thom) Samson *in* Stud. Mycol. 6:58. 1974.
Penicillium lilacinum Thom.
From soil. Halifax Co. June 1970-R. Brown (DAOM 137974).

★**Paecilomyces marquandii** (Massee) Hughes *in* Commonw. Mycol. Inst. Mycol. Pap. 45:30. 1951.
Spicaria violacea Abbott.
Verticillium marquandii Massee.
From milled peat, *Sphagnum* sp., and soil. Cumberland and Kings Co. 1961-C.O.G.

Paecilomyces striatisporus Onions & Barron *in* Commonw. Mycol. Inst. Mycol. Pap. 107:19. 1967.
Acremonium striatisporum (Onions & Barron) W. Gams. [*Cephalosporium-artige* Schimmelpilze (Hyphomycetes) G. Fischer, Stuttgart:97. 1971].
From soil. Cumberland Co. 1980-D.B., A.T.

★**Paecilomyces varabilis** Barron *in* Can. J. Bot. 39:1576. 1961.
From crown rot canker of *Malus pumila* Mill. (apple). Kings Co. 17 Oct. 1969-C.O.G.

★**Paecilomyces variotii** Bain. *in* Bull. Soc. Mycol. Fr. 23:26. 1907.
Penicillium divaricatum Thom.
Spicaria divaricata (Thom) Gilman & Abbott.
From calyx of *Fragaria* sp. (cultivated strawberry) and from primocanes of *Rubus idaeus* L. (red raspberry). Colchester and Kings Co. 19 Dec. 1966-C.O.G.

Panaeolus campanulatus (L. ex Fr.) Quél. *in* Flore Mycol.:54. 1888.
On cow dung and pasture land. Colchester, Kings, Lunenburg and Pictou Co. 1908-A.H.M. (KM-417, 418, 5404 *in* DAOM, K.A.H.). (L.E.W.-509, 509a).

Panaeolus retirugis (Fr.) Gill. *in* Hymén. Fr., tab. 415. 1874.
On dung. Annapolis, Antigonish and Kings Co. 1980-A.H.M. (KM-539, 5406 *in* DAOM, K.A.H.).

Panaeolus semiovatus (Sow. ex Fr.) Lundell *in* Fung. Exs. Upsal.:537. 1937.
Anellaria semiovata (Sow. ex Fr.) Pearson & Dennis.
Anellaria separata (L.) Karst.
Panaeolus separatus (L. ex Fr.) Gill.
From dung. Halifax Co. 1881-J.S. (sub *Agaricus*).

Panellus serotinus (Schrad. ex Fr.) Kühner *in* Kühner & Romagnesi, Flora Analyt. Champ. Super.:67. 1953.
Hohenbuehelia serotina (Schrad. ex Fr.) Sing.
Pleurotus serotinus (Schrad. ex Fr.) Kummer.

On logs of *Acer saccharum* Marsh. (sugar maple), *Betula lutea* Michx. f. (yellow birch) *Fagus grandifolia* Ehrh. (beech) and *Tsuga canadensis* (L.) Carr. (hemlock). Annapolis, Colchester, Kings, Lunenburg and Pictou Co. 1908-A.H.M. (KM-456, 990 *in* DAOM, K.A.H.).

Panellus stipticus (Bull. ex Fr.) Karst. *in* Bidr. Finl. Nat. Folk 32:14. 1879.
Panus stipticus (Bull. ex Fr.) Fr.
On *Alnus rugosa* (DuRoi) Spreng. (speckled alder), *Betula lutea* Michx. f. (yellow birch), *Fagus grandifolia* Ehrh. (beech) and *Fraxinus americana* L. (white ash). General. 1881-J.S. (A.H.M.) (KM-414, 2714 *in* DAOM, K.A.H.) (L.E.W.-539).

Panus conchatus (Bull. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:398. 1838.
Panus torulosus Fr.
On stumps and branches of *Fagus grandifolia* Ehrh. (beech) and *Ulmus* sp. (elm). Kings Co. 23 July 1931-K.A.H. (KM-415, 416, 870, 871, 5396, 5397 *in* DAOM as *P. torulosus* fide A.H.S.).

Panus laevis Berk. & Curt. *in* Ann. Mag. Nat. Hist. Sér 2, 11:427. 1853.
Panus strigosus Berk. & Curt.
Pleurotus levis (Berk. & Curt.) Sing.
On stumps and limbs of *Acer* sp. (maple) and *Fagus* sp. (beech). Kings Co. 1927-K.A.H. (KM-412, 989, 4119 *in* DAOM).

Panus rudis Fr. *in* Epicr. Syst. Mycol.:398. 1838.
On dead *Acer* sp. (maple) and *Fagus* sp. (beech). Kings and Lunenburg Co. 20 June 1931-K.A.H. (KM-413, 872 *in* DAOM).

★**Papulospora anomala** Hotson *in* Proc. Am. Acad. Arts Sci. 48:270. 1912.
On calyx of *Fragaria* sp. (cultivated strawberry) and wood of *Rhododendron* sp. Kings Co. 25 July 1962-C.O.G., W.B.K.

Papulospora halima Anastasiou *in* Nova Hedwigia 6:266. 1963.
On driftwood. Lunenburg Co. 1970-G.A.N.

Paradidymella tosta (Berk. & Br.) Petrak *in* Ann. Mycol. 25:238. 1927.
Didymella tosta (Berk. & Br.) Sacc.
On *Epilobium angustifolium* L. (fire-weed). Colchester Co. 18 July 1933-L.E.W. (W-1589).

Passerinula candida Sacc. *in* Fung. Ven. Novi vel Critici., Ser. 4:22. 1875.
Imbedded in the apothecia of a discomycete on *Abies balsamea* (L.) Mill. (balsam fir). Colchester Co. 25 July 1931-L.E.W. (W-1148)

Patinella punctiformis Rehm *in* Rabenhorst, Kryptogamenfl. 1(3):311. 1889.
On decorticated wood of *Abies* sp. (fir). Colchester Co. 16 June 1926-L.E.W. (W-P378, 1600).

Paxillus atrotomentosus (Batsch ex Fr.) Fr. *in* Epicr. Syst. Mycol.:317. 1838.
On old stumps. Hants, Kings and Pictou Co. 1913-A.H.M. (KM-421, 2715, 4115 *in* DAOM, K.A.H., fide A.H.S.).

Paxillus involutus (Batsch ex Fr.) Fr. *in* Epicr. Syst. Mycol. 317. 1838.
On mossy hummocks, under logs of *Abies* sp. (fir) and *Fagus grandifolia* Ehrh. (beech). Annapolis, Colchester, Hants and Kings Co. 1913-A.H.M. (KM-422, 4116 *in* DAOM, K.A.H.) (L.E.W.-629, 629a).

Pellicularia filamentosa (Pat.) Rogers *in* Farlowia 1:113. 1943.
See *Thanatephorus cucumeris* (Frank) Donk.

Pellicularia isabellina (Fr.) Rogers *in* Farlowia 1:99. 1943.
See *Botryohypochnus isabellinus* (Fr. ex Schleich.) Erikss.

Pellicularia pruinata (Bres.) Rogers *in* Linder, Lloydia 5:170. 1942.
See *Botryobasidium pruinatum* (Bres.) Donk.

Pellicularia subcoronata (Höhn. & Litsch.) Rogers *in* Farlowia 1:104. 1943.
See *Botryobasidium subcoronatum* (Höhn. & Litsch.) Donk.

Pellicularia vaga (Berk. & Curt.) Rogers *in* Linder, Lloydia 5:170. 1942.
See *Botryobasidium vagum* (Berk. & Curt.) Rogers.

Penicillium brefeldianum Dodge *in* Mycologia 25:92. 1933.
Isolated from soil. Cumberland Co. 1971-D.B. et al.

Penicillium brevi-compactum Dierchx *in* Soc. Sci. Brux. 25:88. 1901.
Isolated from soil. Cumberland Co. 1971-D.B. et al.

★**Penicillium chermesinum** Biourge *in* Monogr, La Cellule 33:284-285, 1923; Thom, The Penicillia:192-193. 1930.
From tuber of *Solanum tuberosum* L. (potato). Associated with Pink Eye rot. Kings Co. 25 Sept. 1963-C.O.G.

★**Penicillium claviforme** Bain. *in* Bull. Trimest. Soc. Mycol. Fr. 21:127. 1905.
On calyx of *Fragaria* sp. (cultivated strawberry), from milled peat *Sphagnum* sp. and fruit of *Vaccinium macrocarpon* Ait. (cranberry). Inverness and Kings Co. June 1962-C.O.G.

Penicillium decumbens Thom *in* Bull. U.S. Dep. Agric. 118:71. 1910.
Isolated from soil. Cumberland Co. 1971-D.B. et al.

Penicillium expansum Lk. ex S. F. Gray *in* Nat. Arr. Br. Pl. 1:554. 1821.
Penicillium glaucum Lk.
On *Brassica oleracea* L. var. *capitata* L. (cabbage) and common cause of rot of fruit of *Malus pumila* Mill. (apple) in storage. General. 1908-A.H.M.

★**Penicillium frequentans** Westling *in* Grünen Penicill., Ark. Bot. 11:133. 1911.
From twig callus tissue of *Vaccinium angustifolium* Ait. (lowbush blueberry). Kings Co. 6 Feb. 1972-C.O.G., N.L.N. (I.M.I. 164401).

★**Penicillium funiculosum** Thom *in* Bull. U.S. Dep. Agric. Bur. Anim. Ind. 118:69. fig. 27. 1910.
On calyx of *Fragaria* sp. (cultivated strawberry). Kings Co. 1962-C.O.G.

Penicillium gladiola McCull. & Thom *in* Science 67:216-217. 1928.
On corms of *Gladiolus hortulanus* Bailey. Kings Co. 17 May 1943-J.F.H.

★**Penicillium helicum** Raper & Fennell *in* Mycologia 40:515. 1948.
See stat. perf. *Talaromyces helicus* Benjamin.

Penicillium janthinellum Biourge *in* Monogr. La Cellule 33:258-260. 1923.
Isolated from soil. Cumberland Co. 1971-D.B. et al.

Penicillium lanosum Westling *in* Grünen Penicill., Ark. Bot. 11:97. 1911.
Isolated from forest soil. Cumberland Co. 1971-D.B. et al.

★**Penicillium luteum** Zukal *in* Sitzungsber. Akad. Wien 98:561. 1889.
On calyx of *Fragaria* sp. (cultivated strawberry). Kings Co. 23 July 1962-C.O.G.

Penicillium notatum Westling *in* Grünen Penicill., Ark. Bot. 11:95. 1911.
Isolated from forest soil. Cumberland Co. 1971-D.B. et al.

Penicillium steckii Zaleski *in* Bull. Int. Acad. Pol. Sci. Lett., Cl. Sci. Math. Nat., Ser. B. Sci. Nat. 1927(6B):469-471. 1927.
From soil. Cumberland Co. 1980-D.B., A.T.

★**Penicillium striatum** Raper & Fennell *in* Mycologia 40:521. 1948.
See stat. perf. *Hamigera striata* (Raper & Fennell) Stolk & Samson.

Penicillium terlikowski Zaleski *in* Bull. Int. Acad. Pol. Sci. Lett. Cl. Sci. Math. Nat., Ser. B. Sci. Nat. 1927 (6B): 501-502. 1927.
Isolated from reclaimed marshland soil. Cumberland Co. 12 June 1967-D.B., A.T., M.M. Hoehn.

Penicillium thomii Maire *in* Bull. Soc. Hortic. Nat. Afr. Nord:189-192. 1917.
From milled peat, *Sphagnum* sp. and *Vaccinium macrocarpon* Ait. (cranberry). Inverness and Kings Co. 1961-C.O.G. (DAOM 145742).

Penicillium variabile Sopp *in* Monogr. Pilzg. Penicillium:169. 1912.
From fruit of *Vaccinium macrocarpon* Ait. (cranberry) decaying in storage. Kings Co. 16 Dec. 1975-C.O.G., A.H.S.O. (I.M.I. 200607, 200608).

Penicillium waksmani Zaleski *in* Bull. Int. Acad. Pol. Sci. Lett., Cl. Sci. Math. Nat., Ser. B. Sci. Nat. 1927 (6B):468-469. 1927.
From soil. Cumberland Co. 1980-D.B., A.T.

Peniophora affinis Burt *in* Ann. Mo. Bot. Gard. 12:266. (1925) 1926.
Corticium evolvens Fr.
On *Acer* sp. (maple), *Alnus* sp. (alder), *Crataegus* sp. (hawthorn) and *Fagus grandifolia* Ehrh. (beech). Colchester Co. 26 Aug. 1935-L.E.W. (W-1801, 1801a, fide H.S.J.) (KM-4282, 4283 *in* DAOM, K.A.H. det. L.K.W.).

Peniophora aspera (Pers.) Sacc. *in* Flora Ital. Crypt., Hymen.:1182. 1916.
Peniophora setigera (Fr.) Höhn. & Litsch.
On *Abies balsamea* (L.) Mill. (balsam fir), *Acer saccharum* Marsh. (sugar maple), *Alnus* sp. (alder), *Betula lutea* Michx. f. (yellow birch), *Fagus* sp. (beech), *Prunus* sp. (stone fruit) and *Tilia americana* L. (basswood). General. 8 Aug. 1929-L.E.W. (W-1712, 1714a,b) (KM-2828, 2829 *in* DAOM, K.A.H. det. R.M.L.).

Peniophora aurantiaca (Bres.) Höhn. & Litsch. *in* Sitzungsber. K. Akad. Wiss. Math.-Naturwiss. Kl. 115(1):1586. 1906.
On stems of *Alnus* sp. (alder). Colchester Co. 7 Sept. 1929-L.E.W. (W285a, fide M.A.D.).

Peniophora byssoides (Pers. ex Fr.) Bres. *in* Brinkmann Westf. Prov.-Ver. Jahresber. 26:130. 1898.
On *Abies balsamea* (L.) Mill. (balsam fir). Kings Co. 1 Sept. 1934-K.A.H. (KM-114 *in* DAOM) (O-F5489, 5492).

Peniophora carnosa Burt *in* Ann. Mo. Bot. Gard. 12:325. (1925)1926.
On *Abies balsamea* (L.) Mill. (balsam fir), *Betula* sp. (birch), *Fagus grandifolia* Ehrh. (beech), *Picea* sp. (spruce) and *Populus* sp. (poplar). Colchester and Halifax Co. 3 July 1931-L.E.W. (W-1773, 1794).

Peniophora cinerea (Pers. ex Fr.) Cke. *in* Grevillea 8:21. 1879.
On *Acer rubrum* L. (red maple), *A. saccharum* Marsh. (sugar maple), *Betula alba* L. (white birch), *Corylus cornuta* Marsh. (beaked hazelnut), *Populus* sp. (poplar), *Prunus virginiana* L. (choke cherry) and *Rubus* sp. (brambles). Colchester and Kings Co. 8 July 1931-L.E.W. det. M.A.D. (O-F8104) (KM-3051 *in* DAOM, K.A.H.).

Peniophora crassa Burt ex Pk. *in* Annu. Rep. N.Y. State Mus. 54:155. 1901.
On coniferous wood. Colchester Co. 20 Aug. 1935-L.E.W. (W-1797).

Peniophora cremea (Bres.) Sacc. & Syd. *in* Syll. Fung. 16:195. 1902.
On *Acer spicatum* Lam. (mountain maple), *Alnus* sp. (alder), *Betula* sp. (birch), *Fagus grandifolia* Ehrh. (beech), *Picea* sp. (spruce) and *Polyporus betulinus* (Bull.) Fr. (tree fungus). Colchester Co. 27 June 1931-L.E.W. (W-1734, 1739, 1798, 1799, 1804).

Peniophora flavido-alba Cke. *in* Grevillea 8:21. 1879.
On *Fagus grandifolia* Ehrh. (beech). 1975-L.P.M., J.M.M.

Peniophora gigantea (Fr.) Massee *in* J. Linn. Soc. Lond. Bot. 25:142. 1889.
On *Picea rubens* Sarg. (red spruce). 1975-L.P.M., J.M.M.

Peniophora gracillima Ell. & Ev. *in* Rogers & Jackson, Farlowia 1:317. 1943.
On *Abies* sp. (fir), *Acer* sp. (maple), *Alnus* sp. (alder) and *Prunus* sp. (stone fruits). Colchester Co. July and Aug. 1935-L.E.W. (W-1743, 1743a-c) fide H.S.J.

Peniophora greschikii (Bres.) Bourd. & Galz. *in* Hymén. Fr.:300. (1927)1928.
On *Abies balsamea* (L.) Mill. (balsam fir). Colchester Co. 26 June 1935. L.E.W. (W-1704) det. H.S.J.

Peniophora incarnata (Pers. ex Fr.) Karst. *in* Bidr. Finl. Nat. Folk 48:424. 1889.
On *Acer platanoides* L. (Norway maple), *Corylus cornuta* Marsh. (beaked hazelnut), *Fagus grandifolia* Ehrh. (beech), *Salix* sp. (willow) and *Sambucus* sp. (elder). Colchester Co. 16 June 1926-L.E.W. det. M.A.D. (KM-2804-2806, 3058 *in* DAOM, K.A.H.).

Peniophora mutata (Pk.) Höhn. & Litsch. *in* Sitzungsber. K. Akad. Wiss. Math.-Naturwiss. Kl. 115(1):1580. 1906.
On *Aesculus hippocastanum* L. (horse chestnut) and *Populus* sp. (poplar). 1975-L.P.M., J.M.M.

Peniophora nuda (Fr.) Bres. *in* Atti R. Accad. Rovereto, Ser. 3, 3:114. 1897.
On *Acer platanoides* L. (Norway maple) and *Fagus grandifolia* Ehrh. (beech). Kings Co. 25 Nov. 1931-K.A.H. (KM-141, 143, 3053, 3055 *in* DAOM) (O-F5419, 5420).

Peniophora pallidula (Bres.) Bres. apud Bourd. & Galz., *in* Bull. Soc. Mycol. Fr. 28:390. 1913.
Hyphodontia pallidula (Bres.) Erikss.
On coniferous wood. Colchester Co. 30 Aug. 1933-L.E.W. (W-1738a,b) det. M.A.D. & A.H.S.

Peniophora pithya (Pers.) Erikss. *in* Symb. Bot. Upsal. 10(5):45. 1950. (see also Can. J. Bot. 34:122. 1956).
On *Picea* sp. (spruce). 1975-L.P.M., J.M.M.

Peniophora polygonia (Pers. ex Fr.) Bourd. & Galz. *in* Hymén. Fr.:320. 1927.
On *Populus tremuloides* Michx. (trembling aspen). 1975-L.P.M., J.M.M.

Peniophora sambuci (Pers.) Burt *in* Ann. Mo. Bot. Gard. 12:233. (1925)1926.
On *Sambucus* sp. (elder) and *Tsuga canadensis* L. (hemlock). Kings Co. 14 Nov. 1931-K.A.H. (KM-120, 140 *in* DAOM) (O-F5421, 5488).

Peniophora sanguinea (Fr.) Höhn. & Litsch. *in* Sitzungsber. K. Akad. Wiss. Math.-Naturwiss. Kl. 115(1):1588. 1906.
On *Betula lutea* Michx. f. (yellow birch), *Fagus grandifolia* Ehrh. (beech) and *Picea* sp. (spruce). Colchester Co. 17 July 1935-L.E.W. (W-1744 fide H.S.J.).

Peniophora septentrionalis Laurila *in* Ann. Bot. Soc. Zool.-Bot. Fenn. "Vanamo" 10(4):10. 1939.
On *Picea rubens* Sarg. (red spruce). 1975-L.P.M., J.M.M.

Peniophora subalutacea (Karst.) Höhn. & Litsch. *in* Sitzungsber. K. Akad. Wiss. Math.-Naturwiss. Kl. 115(1):1601. 1906.
On *Abies balsamea* (L.) Mill. (balsam fir). Kings Co. 7 Nov. 1954-K.A.H. (KM-3069 *in* DAOM).

★**Peniophora tenuis** (Pat.) Massee *in* J. Linn. Soc. Lond. Bot. 25:149. 1889.
Hyphoderma tenue (Pat.) Donk.
On *Abies balsamea* (L.) Mill. (balsam fir) and *Picea* sp. (spruce). Kings Co. 1952-K.A.H., C.L.L. (KM-1695 *in* DAOM, det. M.K.N.).

Peniophora velutina (DC. ex Fr.) Cke. *in* Grevillea 8:21. 1879.
On *Fagus grandifolia* Ehrh. (beech). Colchester Co. 11 July 1931-L.E.W. det. M.A.D.

★**Peniophora violaceo-livida** (Sommf.) Massee *in* J. Linn. Soc. Lond. Bot. 25:152. 1889.
Corticium violaceo-lividum (Sommf.) Fr.
On *Acer* sp. (maple), *Alnus* sp. (alder) and *Pinus* sp. (pine). Halifax and Kings Co. 29 Oct. 1953-K.A.H. (KM-2809 det. R.M.L., 4278 *in* DAOM).

Perenniporia medulla-panis (Jacq. per Fr.) Donk *in* Persoonia 5:76. 1967.
Poria medulla-panis (Pers.) S.F. Gray.
Poria unita (Pers.) Cke.
On *Quercus* sp. (oak). Annapolis and Pictou Co. 1908-A.H.M.

Perenniporia subacida (Pk.) Donk *in* Persoonia 5:76. 1967.
Chaetoporus subacidus (Pk.) Bond. & Sing.
Poria subacida (Pk.) Sacc.
On *Abies balsamea* (L.) Mill. (balsam fir), *Acer* sp. (maple), *Betula lutea* Michx. f. (yellow birch), *B. papyrifera* Marsh. (white birch), *Picea rubens* Sarg. (red

spruce), *Picea* sp. (spruce), *Populus* sp. (poplar), *Quercus* sp. (oak) and *Tsuga canadensis* (L.) Carr. (hemlock). Colchester, Halifax and Kings Co. 1930-J.H.F. (L.E.W.-1186, 1316, 1627) (O-F5477) (KM-4235-4248, 4263, 4264 *in* DAOM, K.A.H.) (WS-303 *in* ACAD).

★**Periconia igniaria** Mason and M.B. Ellis *in* Commonw. Mycol. Inst. Mycol. Pap. 56:104. 1953.
From petiole of *Fragaria* sp. (cultivated strawberry). Kings Co. Sept. 1963-C.O.G., W.B.K.

Peridermium balsameum Pk. *in* Annu. Rep. N.Y. State Mus. 27:104. 1875.
See *Uredinopsis americana* Syd.

Peridermium coloradense (Diet.) Arth. & Kern. *in* Bull. Torrey Bot. Club 33:426. 1906.
See *Chrysomyxa arctostaphyli* Diet.

Peronospora antirrhini Schroet. *in* Hedwigia 13:183. 1874.
On *Antirrhinum majus* L. (snapdragon). Yarmouth Co. 19 June 1930-J.F.H.

Peronospora arthuri Farl. *in* Bot. Gaz. 8:315. 1883.
On *Oenothera biennis* L. (evening primrose). Kings Co. 1943-J.F.H.

Peronospora cakiles Savile *in* Can. J. Bot. 35:197. 1957.
On *Cakile edentula* (Bigel.) Hook. var. *edentula* (sea rocket). Antigonish and Cape Breton Co. 14 Aug. 1956-D.B.O.S. (Savile 3262, 3292 *in* DAOM).

Peronospora destructor (Berk.) Casp. ex Berk. *in* Not. Br. Fungi:341. 1860.
On *Allium cepa* L. (onion). Kings Co. 20 Aug. 1925-J.F.H.

Peronospora farinosa (Fr.) *in* Summa Veg. Scand.:493. 1849.
Peronospora effusa (Grev.) Rabenh.
On *Chenopodium album* L. (pigweed), *Plantago major* L. (plantain) and *Spinacia oleracea* L. (spinach). General. 26 Aug. 1926-J.F.H.

Peronospora grisea (Ung.) Ung. *in* Oesterr. Bot. Z. 5:315. 1847.
Peronospora grisea (Ung.) de Bary. (Ann. Sci. Nat., Ser. 4, 20:119. 1863).
On *Veronicastrum virginicum* (L.) Farw. (Culver's root). Kings Co. 19 June 1936-J.A.B. det. I.L.C.

Peronospora manshurica (Naumov) Syd. ex Gäum. *in* Beitr. Krypt. Fl. Schweiz 5(4):221. 1923.
On *Glycine max.* (L.) Merr. (soybean). Cumberland and Kings Co. 7 Aug. 1941-J.F.H. (O-7524).

Peronospora obovata Bon. *in* Rabenhorst, Fung. Eur. Exs.:289. 1860.
On *Spergula arvensis* L. (corn spurrey). Kings Co. 22 July 1940-J.F.H.

Peronospora parasitica (Pers.) (Fr.) Fr. *in* Summa. Veg. Scand.:493. 1849.
Peronospora brassicae Gäum.
On *Brassica napobrassica* (L.) Mill. (Swede turnip or rutabaga), *B. oleracea L.* var. *capitata* L. (cabbage), *B. oleracea* var. *botrytis* L. (cauliflower), *Capsella bursa-pastoris* (L.) Medic. (shepherds purse) and *Raphanus raphanistrum* L. (wild radish). General. 6 Aug. 1940-J.F.H. (O-4508 det. I.L.C.).

★**Peronospora tabacina** Adam *in* J. Dep. Agric. Victoria 31:416. 1933.
On *Lycopersicon esculentum* Mill. (tomato). Kings Co. 15 July 1970-C.O.G. (in greenhouse).

Peronospora viciae (Berk.) Casp. *in* Monatsber. K. Preuss. Akad. Wiss.:330. 1855.
On *Pisum sativum* L. (pea). Annapolis Co. 25 July 1946-J.F.H., K.A.H.

Pestalotia funerea Desm. *in* Ann. Sci. Nat. Bot., Sér. 2, 19:335-336. 1843.
Pestalotiopsis funerea (Desm.) Stey.
On *Juniperus* sp. (juniper), *Pinus resinosa* Ait. (red pine) and *Thuja occidentalis* L. (eastern white cedar). Hants and Kings Co. 15 June 1925-J.F.H. (DAOM 151428, C.O.G., J.B.).

★**Pestalotia longisetula** Guba *in* Monog. of *Monochaetia* and *Pestalotia*:220. 1961.
On stems of *Rosa* sp. (rose) in greenhouse. Cumberland Co. 26 Feb. 1958-K.A.H., C.O.G., K.A.P. (DAOM 139518).

Pestalotia neglecta Thüm. *in* Inst. Rev. Sci. Litt. Coimbra, Sér. 2, 27:326. 1880.
On wood of *Juniperus communis* L. (common juniper). Kings Co. 1925-J.F.H., J.B. (DAOM 151430) (Wehm. (1950) as *P. funerea* Desm.).

Pestalotia sydowiana Bres. *in* Hedwigia 35:Beibl. 32-33. 1896.
On leaves of *Azalea* sp. in greenhouse, from crown of *Fragaria* sp. (cultivated strawberry), on twigs of *Malus pumila* Mill. (apple) and on leaves of *Rhododendron* sp. Hants and Kings Co. Dec. 1966-C.O.G., J.A.P., R.A.S., R.W.D. (DAOM 124494, 145743-145746).

Pestalotia truncata Lév. *in* Ann. Sci. Nat. Bot., Sér. 3, 5:285. 1846.
See *Truncatella angustata* (Pers. ex Lk.) Hughes.

Pestalotia vaccinii (Shear) Guba *in* Phytopathology 19:201-202. 1929.
From fruit of *Vaccinium angustifolium* Ait. (lowbush blueberry), leaves of *V. corymbosum* L. (highbush blueberry), and fruit of *V. macrocarpon* Ait. (cranberry). Kings and Richmond Co. 8 Dec. 1945-K.A.H.

★**Pestalotiopsis adusta** (Ell. & Ev.) Stey. *in* Trans. Br. Mycol. Soc. 36:82. 1953.
Pestalotia adusta Ell. & Ev.
On leaf of *Rhododendron* sp. and primocanes of *Rubus idaeus* L. (red raspberry). Kings Co. 17 Aug. 1970-C.O.G., K.A.P. (DAOM 139514, 145843).

★**Pestalotiopsis guepini** (Desm.) Stey. var. **guepini** *in* Bull. Jard. Bot. Etat Brux. 19:308. 1949.
Pestalotia guepini Desm.
On leaves of *Rhododendron* sp. Kings Co. 7 Sept. 1972-C.O.G., K.A.P. (DAOM 139515).

Pestalotiopsis guepini (Desm.) Stey. var. **macrotricha** (Kleb.) Sutton *in* Commonw. Mycol. Inst. Mycol. Pap. 80:11. 1961.
Pestalotia macrotricha Kleb.
On leaves and wood of *Rhododendron* sp. Kings Co. 26 Sept. 1958-J.F.H., K.A.H., C.O.G., K.A.P. (DAOM 139517).

★**Pestalozzina unicolor** (Berk. & Curt.) Sacc. *in* Syll. Fung. 11:580. 1895.
Pestalotia unicolor Berk. & Curt.
On twigs of *Thuja occidentalis* L. (eastern white cedar). Hants Co. 6 June 1975-C.O.G., J.B. (DAOM 151428, 151429).

★**Petriella sordida** (Zukal) Barron & Gilman *in* Can. J. Bot. 39:839-941. 1961.
On twigs of *Malus pumila* Mill. (apple). Kings Co. 21 Sept. 1976-C.O.G., M.P.C. (DAOM 162159).

Pezicula acericola (Pk.) Sacc. *in* Atti Ist. Veneto 6.3:725. 1885.
On *Acer saccharum* Marsh. (sugar maple) and *A. spicatum* Lam. (mountain maple). Colchester Co. 15 July 1929-L.E.W. (W-1060a).

Pezicula alba Guthrie *in* Trans. Br. Mycol. Soc. 42:502-506. 1959.
See stat. conid. *Phlyctaena vagabunda* Desm.

Pezicula alni (Fckl.) Rehm *in* Ber. Bayer. Bot. Ges. 13:199. 1912.
On *Alnus Crispa* (Ait.) Pursh var. *mollis* Fern. (soft downy alder). Colchester and Kings Co. 27 July 1933-L.E.W. (KP-888 *in* DAOM, K.A.H.) (O-3799, 4648, 5349).

Pezicula corni Petrak *in* Ann. Mycol. 20:197. 1922.
Stat. conid. *Cryptosporiopsis cornina* Petrak & Syd.
On *Cornus* sp. (dogwood). Kings Co. 27 July 1937-K.A.H. (O-4650 det. K.A.H., 4654 det. J.W.G.).

★**Pezicula corticola** (Jorg.) Nannf. *in* Nova Acta Reg. Soc. Sci. Upsąl. 4, 8:94. 1932.
Stat. conid. *Cryptosporiopsis corticola* (Edg.) Nannf.
On wood of *Malus pumila* Mill. (apple). Kings Co. 5 Mar. 1951-D.W.C.

Pezicula corylina Groves *in* Mycologia 30:47. 1938.
Stat. conid. *Crytosporiopsis coryli* (Pk.) Sutton.
On *Corylus cornuta* Marsh. (beaked hazelnut). Colchester and Kings Co. 1950-L.E.W. (W-1067) (O-4631 det. J.W.G.).

Pezicula grovesii Wehm. *in* Can. J. Res., C, 18:543. 1940.
On *Rhododendron canadense* (L.) Torr. (rhodora). Colchester Co. 8 July 1931-L.E.W. (W-432).

Pezicula minuta Pk. *in* Bull. N.Y. State Mus. 1(2):21. 1887.
On *Viburnum lentago* L. (sheep or nannyberry). Colchester Co. 13 July 1931-L.E.W. (W-1002) det. J.W.G.

Pezicula ocellata (Pers.) Seav. *in* North Am. Cup-Fungi (Inoperculates):345. 1951.
Ocellaria ocellata (Pers.) Schroet.
Stat. conid. *Cryptosporiopsis scutellata* (Otth) Petrak.
On *Populus tremuloides* Michx. (trembling aspen) and *Salix* sp. (willow). Colchester Co. 29 July 1929-L.E.W. (W-150, 196, 303, 1710).

Pezicula pruinosa Farl. *in* Mycologia 14:102. 1922.
Stat. conid. *Cryptosporiopsis pruinosa* (Pk.) Wollenw.
On *Amelanchier* sp. (wild pear, shadbush) and *Pyrus comunis* L. (pear). Halifax and Kings Co. 1950-L.E.W. (DAOM 4634 coll. K.A.H.) (On *P. communis* coll. A.D. Crowe, det. J.W.G.).

★ **Pezicula rubi** (Lib.) Niessl *in* Rabenhorst, Fung. Eur. Exs.:2122. 1876.
In old floricanes of *Rubus idaeus* L. (red raspberry). Colchester Co. 17 June 1971-C.O.G. (DAOM 137631).

Peziza ampelina Quél. *in* Grevillea 8:116. 1880.
Peziza violacea Pers.
On rocky bank. Colchester Co. 4 July 1931-L.E.W. (W-389).

Peziza atrovinosa Cke. & Gerard *in* Bull. Buffalo Acad. Sci. 2:288. 1875.
Aleurina atrovinosa (Cke.) Seav.
On soil. Annapolis, Colchester and Kings Co. 18 Aug. 1931-L.E.W. (W-1348 leg. A.H.S.) (KM-1131, 1131d, 1510 *in* DAOM, K.A.H.).

Peziza badia Pers. ex Mérat *in* Nouvelle Floré Paris 1:24. 1821.
On soil or much decayed wood. Annapolis, Colchester, Kings and Pictou Co. 1908-A.H.M. (KM-1122, 1256 *in* DAOM, K.A.H.).

Peziza brunneo-atra Desm. *in* Ann. Sci. Nat. Bot., Sér. 2, 6:244. 1836.
On soil and sawdust. Colchester and Kings Co. 15 July 1931-L.E.W. (W-295a, 1030, 1030a) (KM-1174 *in* DAOM, K.A.H.).

Peziza domiciliana Cke. *in* Gard. Chron. 41:793. 1877.
From greenhouses, cellars and mushroom caves. Kings Co. 30 April 1946-K.A.H. (KM-1125, 1175, 1647 *in* DAOM).

Peziza fimeta (Fckl.) Seav. *in* North Am. Cup-Fungi (Operculates):232. 1928.
On cow dung. Colchester Co. 7 July 1931-L.E.W. (W-378).

Peziza griseorosea Gerard *in* Bull. Torrey Bot. Club 6:31. 1875.
From Kings Co. 28 Aug. 1933-K.A.H. (KM-1176, 1177 *in* DAOM).

Peziza howsei Roze & Boud. *in* Bull. Soc. Bot. Fr. 26:75. 1879.
On soil. Colchester Co. 16-20 Aug. 1931-L.E.W. (W-1343, a-d inc.).

Peziza melaleuca (Bres.) Seav. *in* North Am. Cup-Fungi (Operculates):225. 1928.
On soil. Annapolis Co. 6 Aug. 1932-K.A.H. (KM-1178 *in* DAOM).

★ **Peziza ostracoderma** Korf *in* Mycologia 52:650. 1960.
From milled peat, *Sphagnum* sp. and in flats in greenhouse. Kings Co. 23 March 1961-C.O.G.

Peziza proteana (Boud.) Seav. *in* Mycologia 9:1. 1917.
From pasture. Kings Co. 23 Aug. 1936-K.A.H. (KM-1124 *in* DAOM).

Peziza pustulata (Hedw.) Pers. *in* Syn. Fung.:646. 1801.
On soil. Colchester Co. 18 Aug. 1931-L.E.W. (W-1351 leg. A.H.S.).

Peziza repanda Pers. *in* Icon. Pict. Var. Fung.:49. 1806.
On decayed logs. Inverness Co. 6 Aug. 1931-L.E.W. (W-1223).

Peziza sepiatra Cke. *in* Grevillea 3:119. 1874.
On decayed sticks. Colchester Co. 10 July 1931-L.E.W. (W-481 leg. A.H.S.).

Peziza succosa Berk. *in* Ann. Mag. Nat. Hist. 6:358. 1841.
On bare soil. Colchester and Kings Co. 16 Aug. 1929-L.E.W. (W-242, 480) (KM-1181, 1182 *in* DAOM, K.A.H.).

Peziza sylvestris (Boud.) Sacc. & Trott. *in* Syll. Fung. 22:612. 1913.
On soil in woods. Colchester and Kings Co. 24 June 1931-L.E.W. (W-294) (KM-1183 *in* DAOM, K.A.H.).

Peziza vesiculosa Bull. *in* Herb. Fr., pl. 457, fig. 1. 1789.
On soil. Annapolis, Colchester, Hants and Kings Co. 1913-A.H.M. (L.E.W.-329 leg. A.H.S.) (KM-1126, 1184, 1186 *in* DAOM, K.A.H.).

Pezizella oenotherae (Cke. & Ell.) Sacc. *in* Syll. Fung. 8:278. 1889.
Peziza oenotherae Cke. & Ell. (Grevillea 6:90. 1878). Stat. conid. *Hainesia lythri* (Desm.) Höhn. On *Epilobium glandulosum* var. *adenocaulon* (Hausskn.) Fern. (willow-herb), *Fragaria virginiana* Duchesne (wild strawberry), *Fragaria* sp. (cultivated strawberry), *Oenothera parviflora* L. (small-flowered evening primrose), *Rubus idaeus* L. (red raspberry), *Vaccinium macrocarpon* Ait. (cranberry) and *Vitis vinifera* L. (grape). General. July 1962-C.O.G. (DAOM 145394, 145395).

Phaeocryptopus nudus (Pk.) Petrak *in* Ann. Mycol. 36:14.1938.
Adelopus nudus (Pk.) Höhn.
On killed needles of living *Abies balsamea* (L.) Mill. (balsam fir). Colchester and Kings Counties. 27 June 1931-L.E.W. (W-300a, 1673) (O-3118).

Phaeolus schweinitzii (Fr.) Pat. *in* Ess. Taxon. Hymén.:86. 1900.
Phaeolus sistotremoides (Alb. & Schw.) Murr.
Polyporus schweinitzii Fr.
On *Abies balsamea* (L.) Mill. (balsam fir), *Picea glauca* (Moench) Voss (white spruce), *Pinus* sp. (pine) and on ground. Colchester, Kings and Pictou Co. 1913-A.H.M. (KM-8 *in* DAOM, K.A.H.) (O-F2204, 4744).

Phaeomarasmius confragosus (Fr.) Sing. *in* Lilloa 22:577. 1951.
Naucoria confragosa (Fr.) Sing. (1946).
Pholiota confragosa (Fr.) Karst.
On deciduous wood. Colchester and Kings Co. 20 Aug. 1931-A.H.S., L.E.W. (W-799) (1978-B.J.M., K.A.H. *in* ACAD).

Phaeomarasmius erinaceëllus (Pk.) Sing. *in* Lilloa 22:577. 1951.
Pholiota erinaceëlla Pk.
On rotten wood and stub of *Salix* sp. (willow). Kings Co. 11 July 1932-K.A.H. (KM-430, 431, 432 *in* DAOM).

Phaeomarasmius erinaceus (Fr.) Kühner apud Sing. *in* Tr. Bot. Inst. V.L. Komarova Akad. Nauk S.S.S.R., Ser. 11, 6:483. 1950.
Naucoria erinaceus (Fr.) Gill.
On deciduous wood. Kings Co. 11 July 1932-K.A.H. (DAOM 110730 (K.A.H.-430)).

Phaeophlebia strigoso-zonata (Schw.) Cke. *in* Mycologia 48:401. 1956.
Phlebia strigoso-zonata (Schw.) Lloyd.
Stereum strigoso-zonatum (Schw.) G.H. Cunn.
On *Populus tremuloides* Michx. (trembling aspen) and *Ulmus* sp. (willow). Colchester and Kings Co. 20 July 1931-L.E.W. (W-1109) (KM-2128 det. R.M.L., 5240 *in* DAOM, K.A.H.).

Phaeosphaerella pheidasca (Schroet.) Sacc. *in* Syll. Fung. 11:312. 1895.
Mycosphaerella pheidasca Schroet.
On stems of *Juncus* sp. (grass or rush like plants). Colchester Co. 26 June 1935-L.E.W. (W-1706).

Phaeosphaeria typharum (Desm.) Holm. *in* Symb. Bot. Upsal. 14(3), fig. 11. 1957.
Leptosphaeria typharum (Rabenh.) Karst.
On *Spartina alterniflora* Loisel. (cord-grass), *S. patens* (Ait.) Muhl. (highwater-grass) and culm material. Kings Co. 9 Aug. 1975-G.J.B., D.W.G.

Phallogaster saccatus Morg. *in* J. Cinc. Soc. Nat. Hist. 15:172. 1892.
On soil above log of *Betula* sp. (birch). Colchester Co. 18 Aug. 1931-L.E.W. (W-1249).

Phallus duplicata Bosc *in* Mag. Ges. Nat. Freunde Berl. 5, tab. 6, fig. 7. 1811.
Dictyophora duplicata (Bosc) Fischer.
On soil. Colchester and Kings Co. 5 Sept. 1931-L.E.W. (W-1472 coll. A.H.S.) (KM-769, 1889, 2080 *in* DAOM, K.A.H.) (ACAD 7919, 9772).

Phallus impudicus Linn. *in* Flore Suec.:1261. 1745.
Ithyphallus impudicus (L.) Fr.
From Kings and Shelburne Co. 1908-A.H.M. (1927-K.A.H.) (K.A.H. a doubtful determination; a more western species).

Phellinus conchatus (Pers. ex Fr.) Quél. *in* Ench. Fung.:173. 1886.
Fomes conchatus (Pers. ex Fr.) Gill.
Polyporus conchatus Pers. ex Fr.
On *Betula lutea* Michx. f. (yellow birch) and *Salix* sp. (willow). Kings Co. 23 Nov. 1941-R.M.L. (KM-1258 *in* DAOM, K.A.H., det. R.M.L.).

Phellinus ferreus (Pers.) Bourd. & Galz. *in* Hymén. Fr.:627. 1928.
Polyporus ferreus Pers.
Poria ferrea (Pers.) Bourd. & Galz.
On *Acer rubrum* L. (red maple), *A. saccharum* Marsh. (sugar maple), *Alnus* sp. (alder), *Fagus grandifolia* Ehrh. (beech), *Quercus rubra* L. (red oak), *Quercus* sp. (oak) and *Ulmus americana* L. (white elm). Colchester and Kings Co. 18 July 1933-L.E.W. (W-1592) (KM-4218, 4267 *in* DAOM, K.A.H.) (WS-291, 300 *in* ACAD).

Phellinus ferruginosus (Schrad. ex Fr.) Bourd. & Galz. *in* Hymén. Fr.:625. 1928.
Polyporus ferruginosus Schrad. ex Fr.
Poria ferruginosa (Schrad. ex Fr.) Karst.
On species of *Abies* (fir), *Acer* (maple), *Amelanchier, Crataegus* (hawthorn), *Fagus* (beech), *Populus* (poplar), *Quercus* (oak) and *Salix* (willow). Colchester and Kings Co. 29 June 1931-L.E.W. (W-327, 1686) (KM-117, 117a, 2851, 4219, 4220, 4221 *in* DAOM, K.A.H.) (O-F4770, 5484, 5495) (WS-247, 267, 317 *in* ACAD).

Phellinus igniarius (L. ex Fr.) Quél. *in* Ench. Fung.:172. 1886.
Fomes igniarius (L. ex Fr.) Kichx.
Polyporus igniarius L. ex Fr.
On *Acer rubrum* L. (red maple), *A. saccharum* Marsh. (sugar maple), *Betula lutea* Michx. f. (yellow birch), *B. papyrifera* Marsh. (white birch), *B. populifolia* Marsh. (wire birch), *Fagus grandifolia* Ehrh. (beech), *Malus pumila* Mill (apple), *Populus grandidentata* Michx. (largetooth aspen), *P. tremuloides* Michx. (trembling aspen) and other species of *Acer, Alnus,* (alder), *Betula, Malus* and *Populus.* General. 1886-J.S. (A.H.M.) (L.E.W.-238a, 1506, 1046 coll. A.R.P.) (KM-20a, 90, 2074, 4213, 5236 *in* DAOM, K.A.H.) (O-F-2895, 5027, 5028).

Phellinus laevigatus (Fr.) Bourd. & Galz. *in* Hymén. Fr.:624. 1928.
Polyporus laevigatus Fr.
Poria laevigata (Fr.) Karst.

Fomes igniarius (L. ex Fr.) Kickx var. *laevigatus* (Fr.) Overh.
On *Acer pensylvanicum* L. (striped maple), *A. rubrum* L. (red maple), *A. saccharum* Marsh. (sugar maple), *Betula lutea* Michx. f. (yellow birch), *B. papyrifera* Marsh. (white birch), *B. populifolia* Marsh. (wire birch), *Fagus grandifolia* Ehrh. (beech), *Prunus pensylvanica* L.f. (pin cherry) and other species of *Acer, Betula* and *Prunus*. General. 1950-L.E.W. (KM-1658, 2853, 3095 *in* DAOM, K.A.H. (ACAD 1660, Digby Co. 7 Nov. 1951).

Phellinus nigricans (Fr.) Karst. *in* Finl. Basidv. (Florist. Handb. Nybeg. utg. Soc. Fauna Flora Fenn. 1) 1899.
Fomes igniarius var. *nigricans* Fr.
Phellinus igniarius (L. ex Fr.) Quél. subsp. *nigricans* (Fr.) Bourd. & Galz. (1925).
Polyporus nigricans Fr.
On *Betula* sp. (birch). Hants and Kings Co. and others. 1886-J.S. (KM-73a, 749 *in* DAOM, K.A.H.).

Phellinus pini (Brot. per Fr.) Ames *in* Ann. Mycol. 11:246. 1913.
Cryptoderma pini (Thore ex Fr.) Imaz.
Fomes pini (Thore ex Fr.) Karst.
Phellinus pini (Thore ex Fr.) Pilát (Atl. Champ. Eur. 3:517. 1942).
On *Abies balsamea* (L.) Mill. (balsam fir), *Fagus grandifolia* Ehrh. (beech), *Picea glauca* (Moench) Voss (white spruce). *P. mariana* (Mill.) BSP. (black spruce), *P. rubens* Sarg. (red spruce) and *Picea* sp. General. 1930-J.H.F. (L.E.W.-33, 343, 1480) (KM-84, 748, 3098, 4216 *in* DAOM, K.A.H.).

Phellinus prunicola (Murr.) Gilbertson *in* Mycotaxon 9:73. 1979.
Poria prunicola (Murr.) Sacc. & Trott.
On *Betula lutea* Michx. f. (yellow birch). Kings Co. 1950-L.E.W. (O-F3197).

Phellinus punctatus (Fr.) Pilát *in* Atl. Champ. Eur. 3:530. 1942.
Fomitiporia tsugina Murr.
Polyporus punctatus Fr.
Poria punctata (Fr.) Karst.
On *Alnus* sp. (alder), Populus balsamifera L. (balsam poplar), *Prunus virginiana* L. (choke cherry) and *Salix* sp. (willow). Colchester and Kings Co. 23 July 1931-L.E.W. (W-1126) (KM-4212, 4265, 4266 *in* DAOM, K.A.H.).

Phellinus ribis (Schum. ex Fr.) Quél. *in* Ench. Fung.:173. 1886.
Fomes ribis (Schum. ex Fr.) Gill.
Polyporus ribis Schum. ex Fr.
On the base of bushes of *Ribes rubrum* L. (red currant). Halifax and Kings Co. 1913-A.H.M.

Phellinus viticola (Schw. apud Fr.) Donk *in* Persoonia 4:342. 1966.
Fomes tenuis Karst.
Fomes viticola (Schw.) Lowe.
Poria isabellina (Fr.) Overh.
Trametes gilvoides Lloyd.
On *Acer rubrum* L. (red maple) and *Fagus grandifolia* Ehrh. (beech). Halifax Co. 14 Sept. 1949-K.A.H. (KM-4211 *in* DAOM).

Phellodon confluens (Pers.) Pouz. *in* Česká Mykol. 10:74. 1956.
Hydnum vellereum Pk.
Phellodon vellereus (Pk.) Banker.
Gregarious in deciduous or mixed woods. Annapolis, Colchester and Kings Co. 29 Aug. 1931-L.E.W. (W-1430) (KM-2869, 4753, 4754 *in* DAOM, K.A.H.).

Phellodon melaleucus (Fr.) Karst. *in* Rev. Mycol. 3:19. 1881.
On old stumps of *Abies balsamea* (L.) Mill. (balsam fir). Annapolis, Colchester, Kings, Richmond and Victoria Co. 2 Oct. 1954-K.A.H. (KM-2881, 2882, 3148, 3155-3159, 4568-4582, 4906 and others *in* DAOM).

Phellodon niger (Fr.) Karst. var. **niger** *in* Rev. Mycol. 3:19. 1881.

Under *Pinus resinosa* Ait. (red pine) and *Picea* sp. (spruce). Annapolis, Colchester, Cumberland and Kings Co. 5 Oct. 1954-K.A.H. (KM-2875-2877, 3160-3167, 4589-4598, 4908-4911 and others *in* DAOM).

Phellodon niger (Fr.) Karst. var. **alboniger** (Pk.) Harrison *in* Can. Dep. Agric. Publ. 1099:22. 1961.

Phellodon albo-niger (Pk.) Banker.

In conifer woods. Annapolis, Hants, Inverness and Kings Co. 5 Oct. 1954-K.A.H. (KM-2870-2874, 3138-3147, 3472-3480, 4913-4915, 4983 and others *in* DAOM).

Phellodon tomentosus (Fr.) Banker *in* Mem. Torrey Bot. Club 12:171. 1906.

Hydnum coriaceo-membranaceum Schw.

Phellodon cyathiformis Karst.

Common in coniferous woods. Annapolis, Colchester, Cumberland, Hants, Kings, Lunenburg and Pictou Co. 23 July 1931-L.E.W. (W-1122, 1122a) (KM-664, 690, 708, 4600-4607, 4776 and others *in* DAOM, K.A.H.).

Phialophora fastigiata (Lagerb. & Melin) Conant *in* Mycologia 29:598. 1937.

From butt rot of *Betula lutea* Michx. f. (yellow birch) and from high-rate filter-bed. 1973-G.T. Cole, W.B.K. (DAOM 33682, 33685, 33686, 70170).

Phialophora melinii (Nannf.) Conant *in* Mycologia 29:598. 1937.

From *Abies balsamea* (L.) Mill (balsam fir), *Acer rubrum* L. (red maple) and *Betula lutea* Michx. f. (yellow birch). 1973-G.T. Cole, W.B.K. (DAOM 33683, 33687, 33689-33693, 45623).

Phialophora verrucosa Medlar *in* Mycologia 7:203. 1915.

From *Betula lutea* Michx. f. (yellow birch). 1973-G.T. Cole, W.B.K. (DAOM 33688).

Phlebia albida Post. ex Fr. *in* Monogr. 2:280. 1863 emend. Bres., Ann. Mycol. 1:90. 1903.

Phlebia mellea Overh.

Phlebia merismoides Fr.

On rotting wood of conifers and hardwoods. Annapolis, Colchester, Halifax and Kings Co. 25 Nov. 1932-K.A.H. (KM-144, 4300-4305 *in* DAOM) (O-F5460 as *P. merismoides*).

Phlebia hydnoides (Cke. & Massee) Christiansen *in* Danish Resupinate Fungi 1:175. 1959-1960.

Odontia hydnoides (Cke. & Massee) Höhn.

Peniophora hydnoides Cke. & Massee.

On *Fagus grandifolia* Ehrh. (beech) and *Fraxinus* sp. (ash). Colchester Co. 7 July 1931-L.E.W. (W-421 fide M.A.D.).

Phlebia pubera (Fr.) Christiansen *in* Danish Resupinate Fungi 1:171. 1959-1960.

Corticium pubera (Fr.) Fr.

Peniophora pubera (Fr.) Sacc.

Thelephora pubera (Fr.

On *Acer saccharum* Marsh. (sugar maple) and *Populus* sp. (poplar). Colchester Co. 5 Sept. 1935-L.E.W. (W-1812 det. H.S.J.).

Phlebia radiata Fr. *in* Syst. Mycol. 1:427. 1821.

On *Abies balsamea* (L.) Mill. (balsam fir), *Acer* sp. (maple), *Alnus rugosa* (DuRoi) Spreng. var. *americana* (Regel) Fern. (speckled alder), *Betula lutea* Michx. f. (yellow birch) and *Fagus grandifolia* Ehrh. (beech). General. 24 July 1929-L.E.W. (W-484 fide M.A.D.) (KM-1576 *in* DAOM, K.A.H.).

Phlebopus sulphureus (Fr.) Sing. *in* Am. Midl. Nat. 37:3-4. 1947.

Boletus hemichrysus Berk. & Curt.

On old stump. Colchester Co. 29 Aug. 1931-A.H.S., L.E.W. (W-870). Misidentified. A more southern species. Probably *Phlebopus lignicola* (Kallenbach) Moser fide K.A.H.

Phleogena faginea (Fr.) Link *in* Handb. Gewächse 3:396. 1833.
Pilacre faginea (Fr.) Berk. & Br.
On wood of *Fagus grandifolia* Ehrh. (beech). Kings Co. 11 April 1934-K.A.H. (KM-943, 1098 *in* DAOM).

Phleospora aceris (L.) Sacc. *in* Michelia 1:527. 1879.
Cylindrosporium acerinum (Pk.) Dearn.
Septoria acerina Pk.
Septoria aceris (L.) Berk. & Br.
On *Acer pensylvanicum* L. (striped maple), *A. rubrum* L. (red maple); *A. saccharum* Marsh. (sugar maple) and *A. spicatum* Lam. (mountain maple). General. 13 Aug. 1944-J.F.H.

Phlyctaena vagabunda Desm. *in* Plant. Crypt.:1624. 1847.
Gloeosporium album Osterw.
Stat. perf. *Pezicula alba* Guthrie.
On fruits of *Cydonia oblonga* Mill. (quince) and *Malus pumila* Mill. (apple). Kings Co. 2 May 1946-K.A.H.

Pholiota adiposa (Fr.) Kummer *in* Führ. in Pilzkd.:81. 1882.
On dead wood of *Betula* sp. (birch), *Fagus* sp. (beech) and *Malus* sp. (apple). Kings Co. 9 Oct. 1933-K.A.H. (KM-425, 881, 882 *in* DAOM).

Pholiota albocrenulata (Pk.) Sacc. *in* Syll. Fung. 5:760. 1887.
On *Acer saccharum* Marsh. (sugar maple), *Acer* sp. (maple) and *Betula* sp. (birch). Colchester and Guysborough Co. 15 Aug. 1931-A.H.S., L.E.W. (W-726) (KM-4036 *in* DAOM, K.A.H.).

Pholiota aurivella (Batsch ex Fr.) Kummer *in* Führ. in Pilzkd.:82. 1882.
On *Betula lutea* Michx. f. (yellow birch), *Betula* sp., *Fagus grandifolia* Ehrh. (beech) and *Malus* sp. (apple). Kings Co. 9 Oct. 1933-K.A.H. (KM-427, 4035, 5289 *in* DAOM).

Pholiota flammans (Fr.) Kummer *in* Führ. in Pilzkd.:84. 1871.
On decayed wood, under conifers and mixed wood. Colchester and Kings Co. 2 Sept. 1931-A.H.S., L.E.W. (W-857) (KM-885, 5292 det. J.W.G. *in* DAOM, K.A.H.).

Pholiota lenta (Fr.) Sing. *in* Lilloa 22:516. 1951.
Flammula lenta (Pers. ex Fr.) Kummer.
On buried sticks of *Betula* sp. (birch). Colchester Co. 18 Aug. 1931-L.E.W. (W-785).

Pholiota ombrophila (Fr.) Sacc. *in* Syll. Fung. 5:737. 1887.
Agrocybe ombrophila (Fr.) Sing.
On lawn under trees. Kings Co. 1 Sept. 1951-K.A.H. (KM-1426 *in* DAOM).

Pholiota spumosa (Fr.) Sing. *in* Sydowia 2:37. 1948.
Flammula spumosa (Fr.) Kummer.
On coniferous wood. Colchester Co. 25 Aug. 1931-A.H.S., L.E.W. (W-819, 831).

Pholiota squarrosa (Pers. ex Fr.) Kummer *in* Führ. in Pilzkd.:84. 1871.
On *Betula* sp. (birch), *Malus* sp. (apple) and *Quercus* sp. (oak). Annapolis, Halifax and Kings Co. 1881-J.S. (A.H.M.) (KM-438, 5299, *in* DAOM, K.A.H.).

Pholiota squarrosoides (Pk.) Sacc. *in* Syll. Fung. 5:750. 1887.
On stumps and logs of *Betula* sp. (birch), *Fagus* sp. (beech) and *Salix* sp. (willow). Colchester, Hants, Kings, Lunenburg and Queens Co. 1913-A.H.M. (KM-439-442, 862, 884, 4040-4044, 5298 *in* DAOM, K.A.H. fide A.H.S.) (L.E.W.-862).

Pholiota trachyspora Clem. & Clem. apud Overh. *in* Ann. Mo. Bot. Gard. 14:125. 1927.

On mossy soil under conifers. Colchester Co. 3 July 1931-A.H.S., L.E.W. (Perhaps a *Rozites* or *Cortinarius* fide A.H.S.).

Phoma acicola (Lév.) Sacc. *in* Michelia 2:272. 1881.

On *Pinus resinosa* Ait. (red pine) and *P. sylvestris* L. (Scots pine). 1975-L.P.M., J.M.M.

Phoma betae (Oud.) Frank *in* Z. Ver. Rübenzucker-Ind. Dtsch. Reichs 42:904. 1892.

Phyllosticta tabifica Prill. & Del.

Gloeosporium beta Dearn. & Barth.

See stat. perf. *Pleospora bjoerlingii* Byford.

Phoma destructiva Plowr. *in* Gard. Chron. 16:621. 1881.

On fruit of *Lycopersicon esculentum* Mill. (tomato). Kings Co. 16 Oct. 1950-K.A.H.

Phoma exigua Desm. var. **exigua** *in* Ann. Sci. Nat. Bot., Sér. 3, 11:282. 1849.

Phoma fuscata Sacc.

Phoma dahliae Berk.

On *Chrysanthemum morifolium* (Ramat.) Hemsl. (chrysanthemum) and *Dahlia variabilies* (Willd.) Desf. (garden dahlia). Hants and Kings Co. 29 Sept. 1928-J.F.H.

★**Phoma glomerata** (Cda.) Wollenw. & Hochapf. *in* Z. Parasitkd. 8:592. 1936.

From roots of *Fragaria* sp. (cultivated strawberry) and associated with seed of *Malus pumila* Mill. (apple) infected with *Phytophthora cactorum* (Leb. & Cohn.) Schroet. Kings Co. Jan. 1968-C.O.G.

★**Phoma herbarum** Westend. *in* Bull. Acad. Belg. Cl. Sci. 19(3):118. 1852. Lectotype: Herb. Crypt. Belg, Fasc. 20(1854) no. 965.

From leaves of *Fragaria* sp. (cultivated strawberry). Kings Co. Sept. 1966-C.O.G., G.H.B.

Phoma lingam (Tode ex Fr.) Desm. *in* Ann. Sci. Nat. Bot., Sér. 3, 11:281. 1849.

Plenodomus lingam (Tode ex Fr.) Höhn.

Sphaeria lingam (Tode ex Schw.) Höhn.

Stat. perf. *Leptosphaeria maculans* (Desm.) Ces. & de Not.

On *Brassica napobrassica* (L.) Mill. (rutabaga, Swede turnip). General. Oct. 1929-J.F.H.

Phoma medicaginis Malbr. & Roum. var. **medicaginis** *in* Rev. Mycol. 8:91. 1886.

Ascochyta imperfecta Pk.

Phoma herbarum Westend. f. *medicaginis* Westend.

On *Medicago sativa* L. (alfalfa). Kings Co. 27 May 1936-J.F.H. det. I.L.C.

★**Phoma medicaginis** Malbr. & Roum. var. **pinodella** (L.K. Jones) Boerema apud Boerema, Dorenbosch & Leffring *in* Neth. J. Plant Pathol. 71:88. 1965.

Ascochyta pinodella L.K. Jones.

Phoma trifolii E.M. Johnston & Valleau.

On *Pisum sativum* L. (pea). Kings Co. 20 July 1966-C.O.G.

★**Phoma paeoniae** Allesch. *in* Hedwigia 35:33. 1896.

On stems of *Paeonia* sp. (peony). Kings Co. 26 Feb. 1951-D.W.C.

Phoma pomorum Thüm. *in* Fungi Pomicoli:105. 1879.

Phoma prunicola (Opiz) Wollenw. & Hochapf.

On *Phaseolus vulgaris* L. (bean), *Prunus domestica* L. (plum), *P. salicina* Lindl. (Japanese plum) and *Pyrus communis* L. (pear). Kings Co. 19 Sept. 1925-J.F.H.

★**Phoma thujana** Thüm. *in* Symb. Myc. Aust. 3:no. 62. 1879.

On twigs of *Thuja occidentalis* L. (eastern white cedar). Hants Co. 6 June 1975-C.O.G., J.B. (DAOM 151428).

★**Phoma** sp.

On leaves and wood of *Rhododendron* sp. Kings Co. 7 Sept. 1972-C.O.G., K.A.P. (DAOM 145846a,b).

Phoma sp.
On driftwood. Kings Co. 1970-G.A.N. (Marine collections of *Phoma* cannot be identified until a comprehensive study becomes available fide S.J.H.).

Phomatospora dinemasporium Webster *in* Trans. Br. Mycol. Soc. 38:364. 1955.
Stat. conid. *Dinemasporium strigosum* (Pers. ex Fr.) Sacc.
On culms of *Gramineae* (grasses). Colchester Co. Aug. 1931-L.E.W. (W-1457 as *D. graminum* Lév.).

Phomatospora therophila (Desm.) Sacc. *in* Syll. Fung. 1:433. 1882.
Phyllachora theraphila (Desm.) v. Arx & E. Müller.
On *Juncus effusus* L. var. *compactus* Lej. & Court. (soft rush). 1975-L.P.M., J.M.M.

Phomopsis albicans Syd. *in* Mycoth. Germ. 1012. 1903
Phoma albicans Rob.
On *Leontodon autumnalis* L. (fall dandelion, August flower). Colchester Co. 1950-L.E.W. (W-1452).

★**Phomopsis caraganae** Bond. *in* Not. Syst. Inst. Crypt. Hort. Petropol. 1:84. 1922.
On *Caragana arborescens* Lam. (caragana or Siberian pea-tree). Kings Co. 18 Apr. 1980-C.O.G. (DAOM 176370 coll. K.A.H.) (J. Bissett, B.R.I., Ottawa, agrees possibly this species and similar to the anomorph of *Diaporthe impulsa* (Cke. & Pk.) Sacc. described by Wehmeyer, Univ. Mich. Stud. Sci. Ser. 9:173. 1933).

Phomopsis obscurans (Ell. & Ev.) Sutton *in* Trans. Br. Mycol. Soc. 48:611-616. 1965.
Dendrophoma obscurans (Ell. & Ev.) H.W. And.
On *Fragaria* sp. (cultivated strawberry) and *Fragaria virginiana* Duchesne (wild strawberrry). General. 4 July 1952-C.O.G., D.W.C., D.B.O.S.

Phragmidium americanum (Pk.) Diet. *in* Hedwigia 44:124. 1905.
On *Rosa blanda* Ait., *R. carolina* L. (carolina rose) and *R. virginiana* Mill. (wild rose). General. 1913-W.P.F.

Phragmidium mucronatum (Pers.) Schlect. *in* Fl. Berol. 2:156. 1824.
Phragmidium disciflorum (Tode) J.F. James.
On *Rosa* sp. (rose). General. 8 Aug. 1934-K.A.H. (O-2708, 3655).

Phragmidium potentillae (Pers.) Karst. *in* Bidr. Finl. Nat. Folk 31:49. 1879.
On *Potentilla anglica* Laicharding (cinquefoil). Kings Co. 27 Aug. 1927-J.F.H.

Phragmidium rosae-pimpinellifoliae Diet. *in* Hedwigia 44:339. 1905.
On *Rosa* spp. (rose). General. 1913-A.H.M.

Phragmidium rubi-idaei (DC.) Karst. *in* Bidr. Finl. Nat. Folk 31:52. 1879.
On *Rubus idaeus* L. (raspberry) and *Rubus* spp. Digby Co. 1913-W.P.F.

Phragmidium speciosum (Fr.) Cke. *in* Grevillea 3:171. 1875.
On *Rosa blanda* Ait. (rose), *R. carolina* L. (Carolina rose), *R. virginiana* Mill. (wild rose) and *Rosa* spp. General. 1913-W.P.F. (O-1882, 4955, 7750).

★**Phyllachora ambrosiae** (Schw.) Sacc. *in* Syll. Fung. 2:620. 1883.
On leaves of *Ambrosia artemisiifolia* L. (common ragweed). Kings Co. 13 Sept. 1951-D.W.C.

Phyllachora graminis (Pers.) Fckl. *in* Hedwigia 2:134. 1863.
On *Agropyron cristatum* (L.) Gaertn. (crested wheatgrass), *A. repens* (L.) Beauv. (couchgrass), *A. trachycaulum* (Link) Malte (slender wheatgrass) and *Agrostis palustris* Huds. (creeping bent grass). Cumberland, Inverness and Pictou Co. 1913-A.H.M. (O-4519, I.L.C.).

Phyllachora kalmiae (Pk.) Petrak *in* Ann. Mycol. 39:283. 1941.
Causing witches' broom on *Kalmia angustifolia* L. (sheep laurel or lambkill). Colchester and Halifax Co. 5 Sept. 1929-L.E.W. (W-265).

Phyllachora punctum (Schw.) Orton *in* J. Dep. Agric. Puerto Rico 2:153. 1918.
On leaves of *Panicum subvillosum* Ashe (panic grass). Kings Co. 17 July 1951-D.W.C., G.L.M.

Phyllachora wittrockii (Erikss.) Sacc. *in* Syll. Fung. 2:601. 1883.
See *Phylleutypa wittrockii* (Erikss.) Petrak.

Phyllactinia guttata (Wallr. ex Fr.) Lév. *in* Ann. Sci. Nat. Bot., Sér. 3, 15:144. 1851.
Phyllactinia corylea (Pers.) Karst.
Mildew on *Alnus crispa* (Ait.) Pursh (downy alder), *A. crispa* var. *mollis* Fern., *A. rugosa* (DuRoi) Spreng. (speckled alder), *Betula alba* L. (white birch), *B. lutea* Michx. f. (yellow birch), *B. populifolia* Marsh. (wire birch), *Corylus cornuta* Marsh. (beaked hazelnut) and *Ostrya virginiana* (Mill.) K. Koch (ironwood). General. 1909-W.P.F. (L.E.W.-1478) (DAOM 6077).

Phylleutypa wittrockii (Erikss.) Petrak *in* Ann. Mycol. 39:280. 1941.
Phyllachora wittrockii (Erikss.) Sacc.
Parasitic on growing tips of *Linnaea borealis* L. var. *americana* (Forbes) Rehd. (twin-flower). Colchester Co. 4 June 1931-L.E.W. (W-430, 1555).

Phylloporus rhodoxanthus (Schw.) Bres. *in* Fungi Tridentini, tab. 207. 1900.
In mixed woods. Colchester, Guysborough, Hants and Kings Co. 14 July 1931-A.H.S., L.E.W. (W-626) (KM-423, 900, 4095, 4117 *in* DAOM, K.A.H.).

★**Phyllosticta apicalis** Davis *in* Trans. Wis. Acad. Sci. Arts Lett. 16:761. 1909.
On twigs of *Salix* sp. (willow). Annapolis Co. 2 Aug. 1971-C.O.G.

★**Phyllosticta apocyni** Trel. *in* Trans. Wis. Acad. Sci. Arts Lett. 6:17. 1884.
On leaves of *Apocynum androsaemifolium* L. (milkweed, spreading dogbane). Queens Co. 3 Aug. 1953-D.W.C.

Phyllosticta catalpae Ell. & Mart. *in* Am. Nat. 18:189. 1884.
On *Catalpa* sp. 1903-B.D.H., J.A.K.

Phyllosticta commonsii Ell. & Ev. *in* J. Mycol. 5:146. 1889.
On *Paeonia* sp. (peony). Kings Co. 10 June 1952-J.F.H., D.W.C.

★**Phyllosticta cornuti** Ell. & Kellerm. *in* Bull. Torrey Bot. Club 11:115. 1884.
On leaves of *Asclepias syriaca* L. (milkweed). Kings Co. 16 Oct. 1953-J.F.H.

★**Phyllosticta cytisi** Desm. *in* Ann. Sci. Nat. Bot., Sér. 3, 8:34. 1847.
On *Laburnum anagyroides* Med. (golden chain or bean tree). Kings Co. 5 Sept. 1958-J.F.H.

★**Phyllosticta fragaricola** Desm. & Rob. *in* Desmazières, Pl. Crypt. Fr. 3, 686. 1859.
From crown of *Fragaria* sp. (cultivated strawberry). Kings Co. 25 Mar. 1969-C.O.G.

★**Phyllosticta hamamelidis** (Cke.) G. Martin *in* J. Mycol. 2:15. 1886.
On *Hamamelis virginana* L. (witch hazel). Queens Co. 3 Aug. 1953-D.W.C.

Phyllosticta hydrangae Ell. & Ev. *in* J. Mycol. 5:145. 1889.
On *Hydrangea* sp. Kings Co. 14 July 1931-K.A.H.

Phyllosticta innumerabilis Pk. *in* Bull. Torrey Bot. Club 36:336. 1909.
On *Amelanchier intermedia* Spach (shadbush, wild pear) and *A. stolonifera* Wieg. (drawf juneberry). Kings Co. 23 Aug. 1952-D.W.C., G.L.M., D.B.O.S.

Phyllosticta iridis Ell. & Martin *in* Ellis & Everhart, Proc. Acad. Nat. Sci. Phila. 1893:456. 1894.
On *Iris versicolor* L. (blue flag). Digby Co. 1950-L.E.W. (O-4971 det. I.L.C.).

Phyllosticta lappae Sacc. *in* Michelia 1:151. 1878.
On *Arctium lappa* L. (great burdock). Kings Co. 1 Aug. 1926-K.A.H.

Phyllosticta limitata Pk. *in* Annu. Rep. N.Y. State Mus. 50:115. 1897.
On *Malus pumila* Mill. (apple). Kings Co. 1938-J.F.H.

Phyllosticta lychnidis A. Bondarzew *in* Bull. Jard. Imp. Bot. St. Petersb. 12:102. 1912.
On stems of *Lychnis* sp. (campion or cockle). Kings Co. 20 May 1929-J.F.H.

Phyllosticta minima (Berk. & Curt.) Ell. & Ev. *in* North Am. *Phyllosticta* 1. 1900.
Phyllosticta minima (Berk. & Curt.) Underw. & Earle.
Phyllosticta acericola Ell. & Ev.

On *Acer rubrum* L. (red maple), *A. saccharum* Marsh. (sugar maple) and *A. spicatum* Lam. (mountain maple). Hants, Kings and Shelburne Co. 19 Sept. 1930-J.F.H. (O-1886 as *P. negundinis* Sacc. & Speg.).

★**Phyllosticta minutissima** Ell. & Ev. *in* Proc. Acad. Nat. Sci. Phila. 1891:76. 1891.
On *Acer pensylvanicum* L. (striped maple). Kings Co. 27 Sept. 1951-D.W.C.

Phyllosticta paviae Desm. *in* Ann. Sci. Nat., Sér. 3, 8:32. 1847.
On *Aesculus hippocastanum* L. (horse chestnut). General. Sept. 1919-J.D. (29 Aug. 1925-C.F.T.).

Phyllosticta phaseolina Sacc. *in* Michelia 1:149. 1878.
On leaves of *Phaseolus vulgaris* L. (black kidney bean). Annapolis Co. 1924-K.A.H. (Can. Dep. Agric. Bull. 71:33. 1926).

Phyllosticta prunicola Sacc. *in* Syll. Fung. 3:4. 1884.
On *Malus pumila* Mill. (apple), *Prunus avium* L. (sweet cherry), *P. cerasus* L. (sour cherry) and *P. domestica* L. (European plum). Kings Co. 2 June 1925-J.F.H.

Phyllosticta putrefaciens Shear *in* Bull. Torrey Bot. Club 34:307. 1907.
On fruit and leaves of *Vaccinium macrocarpon* Ait. (large cranberry). Inverness and Kings Co. 22 Nov. 1969-C.O.G.

Phyllosticta pyrina Sacc. *in* Michelia 1:134. 1878.
On *Malus pumila* Mill. (apple) and *Pyrus communis* L. (pear). Kings and Lunenburg Co. 18 Sept. 1925-J.F.H.

Phyllosticta pyrorum Cke. *in* Grevillea 12:26. 1883.
On *Pyrus communis* L. (pear). Kings Co. 1925-J.F.H.

Phyllosticta rhododendri Westend. *in* Bull. Acad. Roy. Soc. Brux.:399. 1851.
On *Rhododendron* sp. Annapolis and Kings Co. June 1933-J.F.H. (DAOM 145751, 149573, C.O.G., J.A.P.).

Phyllosticta rubicola Rabenh. *in* Fung. Eur. Exs.:1757. 1859.
On *Rubus idaeus* L. (red raspberry). General. Aug. 1929-J.F.H.

Phyllosticta sorbi Westend. *in* Bull. Acad. Roy. Soc. Belg., Sér. 2, 2(7):26. 1857.
On *Sorbus aucuparia* L. (rowan tree). 1975-L.P.M., J.M.M.

Phyllosticta violae Desm. *in* Ann. Sci. Nat. Bot., Sér. 3, 8:29. 1847.
On *Viola tricolor* L. (pansy, johnny-jump-up). Kings Co. 21 Sept. 1928-J.F.H. det. K.A.H.

Phyllosticta sp.
On *Abies balsamea* (L.) Mill. (balsam fir). 1975-L.P.M., J.M.M.

Phyllotopsis nidulans (Pers. ex Fr.) Sing. *in* Beih. Bot. Zentralbl. 56, Abt. B,:143 1936.
Agaricus nidulans Pers. ex Fr.
Claudopus nidulans (Pers. ex Fr.) Karst.
Panus dorsalis Fr.
On *Betula populifolia* Marsh. (wire birch) and *Fagus grandifolia* Ehrh. (beech
Kings and Pictou Co. 1908-A.H.M. (KM-192, 1410, 2596 *in* DAOM, K.A.H.).

Physalacria inflata (Schw.) Pk. *in* Bull. Torrey Bot. Club 9:2. 1882.
On decaying wood. Colchester and Kings Co. 21 Aug. 1931-L.E.W. (W-1384 (KM-457 *in* DAOM, K.A.H.).

Physalospora laricis Wehm. *in* Can. J. Res., C, 20:584. 1942.
See *Botryosphaeria laricis* (Wehm.) v. Arx & Müller.

Physalospora miyabeana Fukushi *in* Ann. Phytopathol. Soc. Jpn. 1(4):1. 1921.
On *Salix* sp. (willow). General. 25 Aug. 1925-C.F.T. (O-65 det. I.L.C.).

Physarum cinereum (Batsch) Pers. *in* Neues Mag. Bot. 1:89. 1794.
On straw mulch, decaying leaves and wood and on turf grass in lawns. Colchester, Kings and Pictou Co. 1913-C.L.M. (DAOM 177176, 177177 coll. 24 July 1980 R.A. Murray, R.W.D., C.O.G., det G.P. White).

Physarum confertum Macbr. *in* North Am. Slime-Moulds, ed. 2:64. 1922.
On twigs of *Abies* sp. (fir) and moss. Colchester Co. 15 July 1931-L.E.W. (W-1051, 1353, 1357).

Physarum contextum (Pers.) Pers. *in* Syn. Fung.:168. 1801.
On bark of *Fagus* sp. (beech). Colchester Co. 20 July 1931-L.E.W. (W-1098).

Physarum decipiens Curt. *in* Am. J. Sci. 11.6:352. 1848.
Badhamia decipiens (Curt.) Berk.
On bark of *Fagus* sp. (beech). Colchester Co. 9 July 1931-L.E.W. (W-466).

Physarum galbeum Wingate *in* Macbr., North Am. Slime-Moulds 53. 1899.
On *Abies balsamea* (L.) Mill. (balsam fir). Pictou Co. 1906-C.L.M.

Physarum globuliferum (Bull.) Pers. *in* Syn. Fung.:175. 1801.
On decayed *Abies balsamea* (L.) Mill. (balsam fir), decayed wood and porcupine dung. Colchester and Pictou Co. 1906-C.L.M. (L.E.W.-1268, 1315).

Physarum lateritium (Berk. & Rav.) Morg. *in* J. Cinc. Soc. Nat. Hist. 19:23. 1896.
On decayed wood, leaves and moss. Colchester and Pictou Co. 15 Aug. 1931-L.E.W. (W-1339, 1399).

Physarum luteolum Pk. *in* Annu. Rep. N.Y. State Mus. 30:50. 1878.
Physarum virescens var. *nitens* List.
On moss and lichens. Colchester Co. 13 July 1931-L.E.W. (W-1009).

Physarum mutabile (Rostaf.) List. *in* Monogr. Mycetozoa, ed. 2:53. 1911.
On leaves. Colchester Co. 1 Sept. 1931-L.E.W. (det. H.C. Gilbert, W-1484). May be an aberrant form of something else, fide Martin.

Physarum nutans Pers. *in* Ann. Bot. Usteri 15:6. 1795.
On decayed wood and old fungi. Colchester and Pictou Co. 1906-C.L.M. (L.E.W.-1143, 1144).

Physarum pulcherrimum Berk. & Rav. *in* Grevillea 2:65. 1873.
On decayed log. Colchester Co. 27 July 1931-L.E.W. (W-1166).

★**Physarum pusillum** (Berk. & Curt.) List. *in* Monogr. Mycetozoa, ed. 2:64. 1911.
On surface of *Brassica napobrassica* (L.) Mill. (Swede turnip or rutabaga) from storage. Kings Co. 22 Jan. 1979-C.O.G. (DAOM 170967 det. G.P. White).

Physarum rubiginosum Fr. *in* Symb. Gast. 21. 1817.
On moss on decayed logs. Colchester Co. 19 Aug. 1931-L.E.W. (W-1365).

Physarum virescens Ditmar *in* Sturm, Dtsch. Fl. Pilze 1:123. 1817.
On moss, twigs and leaves. Colchester, Inverness and Pictou Co. 1906-C.L.M. (L.E.W.-1217, 1358).

Physarum viride (Bull.) Pers. *in* Ann. Bot. Usteri 15:6. 1795.
On decayed wood, twigs and leaves. Colchester and Pictou Co. 1906-C.L.M. (L.E.W.-1095, 1139, 1352).

Phytophthora cactorum (Leb. & Cohn) Schroet. *in* Cohn, Krypt. Fl. Schles. 3(1):236. 1886.
On *Fragaria* sp. (cultivated strawberry), *Malus pumila* Mill. (apple) and *Pyrus communis* L. (pear). Annapolis, Cumberland, Hants and Kings Co. 1919-H.T.G. (Agr. Gaz. Canada 6:951-952. 1919).

Phytophthora erythroseptica Pethybr. *in* Sci. Proc. R. Dublin Soc. 13:529. 1913.
On *Solanum tuberosum* L. (potato). Kings Co. 1963-K.A.H.

Phytophthora fragariae Hickman *in* J. Hortic. Sci. 18:103. 1940.
In roots of *Fragaria* sp. (cultivated strawberry). General. 1948-J.F.H., C.O.G.

Phytophthora infestans (Mont.) de Bary *in* J. R. Agric. Soc., Sér. 2, 12:239. 1876.
On *Solanum tuberosum* L. (potato). General. 1908-A.H.M.

★**Phytophthora nicotianae** B. deHaan *in* Meded. PlTuin Batavia 15:57. 1896, var. **parasitica** (Dastur) Waterh. *in* Commonw. Mycol. Inst. Mycol. Pap. 92:14. 1963.
On *Azalea* sp. and fruit of *Lycopersicon esculentum* Mill. (tomato). Greenhouses. Hants and Kings Co. 4 May 1973-C.O.G., R.W.D.

Phytophthora syringae (Kleb.) Kleb. *in* Krankheiten des Flieders, Berlin:75. 1909.
On fruit of *Malus pumila* Mill. (apple). Kings Co. 8 Jan. 1969-C.O.G., R.G.R. (DAOM 127886).

Pileolaria brevipes Berk. & Rav. *in* Berkeley, Grevillea 3:58. 1874.
On *Rhus radicans* L. (poison ivy). Kings Co. 19 July 1937-A.E.R. (DAOM 4943).

Pilobolus longipes Teigh. *in* Ann. Sci. Nat. Bot., Sér. 6, 4:338. 1876.
On horse dung. Colchester and Halifax Co. 15 July 1929-L.E.W. (W-49, 1180).

Pilosace eximius (Pk.) Sacc. *in* Syll. Fung. 5:1012. 1887.
On decaying log. Halifax Co. 1880-J.S. (A.H.M.).

Piptoporus betulinus (Bull. ex Fr.) Karst. *in* Medd. Soc. Fauna Flora Fenn. 6:9. 1881.
Piptoporus suberosus L. ex Murr.
Polyporus betulinus (Bull.) Fr.
On *Betula* spp. (birch). General. 1908-A.H.M. (L.E.W.-83, coll. A.R.P.) (KM-1271 *in* DAOM, K.A.H.) (O-F2194).

Piricauda arcticoceanarum Moore *in* Rhodora 61:95. 1959.
From submerged wood taken from the sea. Halifax Co. April 1959-Royall T. Moore (coll. D.B.).

Pistillaria micans Fr. *in* Syst. Mycol. 1:497. 1821.
On decayed stems of *Cirsium* sp. (thistle). Colchester Co. 7 July 1933-L.E.W. (W-1576).

Pithoascus intermedius (Emmens & Dodge) v. Arx *in* Persoonia 7(3):373. 1973.
Microascus intermedius Emmens & Dodge.
From seed of *Vaccinium angustifolium* Ait. (lowbush blueberry). Kings Co. 20 June 1978-C.O.G. (DAOM 169158 as *M. intermedius* coll. N.L.N.).

Pithomyces chartarum (Berk. & Curt.) M.B. Ellis *in* Commonw. Mycol. Inst. Mycol. Pap. 76:13-15. 1960.
From leaves of *Brassica oleracea* L. var. *botrytis* L. (cauliflower) and roots of *Pisum sativum* L. (garden pea). Kings Co. 31 Aug. 1970-C.O.G. (DAOM 134958).

Plasmodiophora brassicae Woron. *in* Arb. St. Petersb. Nat. Ges. 8:169. 1877.
On *Brassica nigra* (L.) Koch (black mustard), *B. oleracea* L. var. *botrytis* L. (cauliflower), *B. oleracea* var. *capitata* L. (cabbage), *B. oleracea* var. *gemmifera* Zenker (Brussels sprouts), *B. napobrassica* (L.) Mill. (Swede turnip), *B. rapa* L. (turnip) and *Raphanus sativus* L. (radish). General. 1906-C.L.M.

Plasmopara halstedii (Farl.) Berl. & de Toni *in* Saccardo, Syll. Fung. 7:242. 1888.
On *Ambrosia* sp. (ragweed) and *Helianthus annuus* L. (common sunflower). Kings Co. 23 Sept. 1929-J.F.H.

★**Plasmopara viburni** Pk. *in* Annu. Rep. N.Y. State Mus. 43:28. 1890.
On *Viburnum opulus* L. (snowball). Kings Co. 4 Oct. 1951-D.W.C.

Plasmopara viticola (Berk. & Curt.) Berl. & de Toni *in* Saccardo, Syll. Fung. 7:239. 1888.
On *Vitis labrusca* L. (fox grape). Kings and Yarmouth Co. 1929-J.F.H.

Plectophomella ulmi (Verral & May) Redfern & Sutton *in* Trans. Br. Mycol. Soc. 77:383. 1981.
Dothiorella ulmi Verral & May.
On *Ulmus americana* L. (American elm). Kings Co. 10 July 1936-J.F.H. (O-4496).

Plenodomus meliloti Dearn. & Sanford *in* Ann. Mycol. 28:324. 1930.
Brown root rot of *Medicago sativa* L. (alfalfa). Kings Co. 11 May 1934-J.F.H.

★**Pleomassaria siparia** (Berk. & Br.) Tul. *in* Sel. Fung. Carp. 2:232. 1863.
On wood of *Betula alba* L. (white birch). Kings Co. 15 May 1953-D.W.C.

Pleosphaerulina sojaecola (Massal.) Miura *in* Bull. South Manchuria Rlwy. Co. Agric. Exp. Stn. 11:23. 1921.
Stat. conid. *Phyllosticta sojaecola* Massal.

Phyllosticta glycineum Tehon & Daniels.
On *Glycine max* (L.) Merr. (soybean). Kings Co. 3 Sept. 1943-G.W.H.

Pleospora bjoerlingii Byford *in* Trans. Br. Mycol. Soc. 46:614. 1963.
Mycosphaerella tabifica (Prill. & Del.) Lind.
Pleospora betae (Berl.) Nevodorsky.
Stat. conid. *Phoma betae* (Oud.) Frank.
On *Beta vulgaris* L. (garden beet and mangel). General. 14 Oct. 1926-K.A.H. (O-148 det. I.L.C.) (Stat. perf. *P. bjoerlingii* unknown in Canada, Conners 1967).

Pleospora herbarum (Pers. ex Fr.) Rabenh. *in* Herb. Mycol., ed. 2:547. 1856, var. **herbarum** Wehm. *in* Lloydia 15:82. 1952.
Stat. conid. *Stemphylium botryosum* Wallr.
On *Brassica oleracea* L. var. *botrytis* L. (cauliflower), *Fragaria* sp. (cultivated strawberry). *Lathyrus japonicus* Willd. (beach pea), *Lycopersicon esculentum* Mill. (tomato), *Medicago sativa* L. (alfalfa), *Rhododendron* sp. and *Vaccinium macrocarpon* Ait. (cranberry). Colchester, Digby and Kings Co. 3 Aug. 1933-L.E.W. (W-1672) (DAOM 137380, 137381, 137773, 145899, 146899, C.O.G., R.A.S.).

Pleospora laricina Rehm *in* Hedwigia 21:121. 1882, var. **nitida** (Ell. & Ev.) Wehm. *in* Lloydia 15:95. 1952.
On *Prunus domestica* L. (European plum) and *Rubus idaeus* L. (red raspberry). Cumberland and Kings Co. 25 June 1926-L.E.W. (P359) (DAOM 135366, 145367, C.O.G., R.A.S.).

Pleuroceras populi Thompson *in* Mycologia 46:655. 1954.
Stat. conid *Marssonina rhabdospora* (Ell. & Ev.) Magn.
On leaves of *Populus grandidentata* Michx. (large-toothed aspen). Queens Co. 1 Aug. 1953-D.W.C.

Pleurocybella lignatilis (Pers. ex Fr.) Sing. (sensu Kühner 1926) *in* Mycologia 39:82. 1947.
Pleurotus lignatilis (Fr.) Gill.
On *Fagus grandifolia* Ehrh. (beech). Halifax and Lunenburg Co. 1886-J.S. (A.H.M.).

Pleurocybella porrigens (Pers. ex Fr.) Sing. *in* Mycologia 39:81. 1947.
Nothopanus porrigens (Pers. ex Fr.) Sing.
Pleurotus porrigens (Pers. ex Fr.) Gill.
On *Abies balsamea* (L.) Mill. (balsam fir). Kings Co. 21 Oct. 1932-K.A.H. (KM-454, 5410 *in* DAOM).

Pleurotellus chioneus (Pers.) Kühner *in* Botaniste 17:114. 1926.
Agaricus variabilis Pers. ex Fr.
Pleurotus chioneus (Fr.) Gill.
Reported on twigs. 1886-J.S. (A.H.M.).

Pleurotus applicatus (Batsch ex Fr.) Kummer *in* Führ. in Pilzkd.:65. 1882.
Pleurotus applicatus (Batsch ex Fr.) Gill.
On small stumps. Halifax Co. 1880-J.S. (A.H.M.).

Pleurotus candidissimus (Berk. & Curt.) Sacc. *in* Syll. Fung. 5:368. 1887.
See *Cheimonophyllum candidissimus* (Berk. & Curt.) Sing.

Pleurotus coldwelii MacKay *in* Educational Review (St. John, N.B.) 5:172. 1891.
Growing on piece of whale bone in Mus. Acadia College (Acad. Univ.) Wolfville, Kings Co. 1908-A.H.M.

Pleurotus dryinus (Pers. ex Fr.) Kummer *in* Führ. in Pilzkd.:63. 1882.
Pleurotus subareolatus Pk.
Pleurotus corticatus (Fr. ex Fr.) Kummer.
On *Malus pumila* Mill. (apple). Kings Co. 27 Sept. 1930-K.A.H. (KM-457, 458 *in* DAOM).

Pleurotus ostreatus (Jacq. ex Fr.) Kummer *in* Führ. in Pilzkd.:63. 1882.
Pleurotus salignus (Pers. ex Fr.) Kummer.
On *Aesculus* sp. (horse chestnut), *Betula* sp. (birch), *Fagus* sp. (beech) and *Populus* sp. (poplar). Colchester and Kings Co. 1908-A.H.M. (KM-453, 874 *in* DAOM, K.A.H.) (L.E.W.-609).

Pleurotus unguicularis Fr. *in* Elench. Syst. Mycol.:24. 1828.
On *Populus tremuloides* Michx. (trembling aspen). 1975-L.P.M., J.M.M.

Plicatura crispa (Pers. ex Fr.) Rea *in* British Basidiomycetes:626. 1922.
Merulius crispus (Pers.) Quél.
Plicatura faginea Karst.
Trogia crispa (Pers. ex Fr.) Fr.
On logs of *Alnus* sp. (alder), *Betula* sp. (birch) and *Fagus* sp. (beech). Colchester, Halifax and Kings Co. Sept. 1930-K.A.H. (KM-466, 467, 2762 *in* DAOM).

Plicatura nivea (Fr.) Karst. *in* Krit. Ofvers. Finl. Basidsvampar:342. 1889.
Merulius niveus Fr.
Trogia alni Pk.
On bark of *Alnus* sp. (alder). Annapolis, Colchester and Kings Co. Sept. 1935-L.E.W. (W-1808 det. H.S.J.) (KM-147, 465, 1900, 4298, 4306-4314 *in* DAOM, K.A.H.) (DAOM, F5458, 30382).

★**Pluteus aurantiorugosus** (Trog.) Sacc. *in* Hedwigia 35(7):5. 1896.
Pluteus caloceps Atk. (1909).
Rare. On wood of *Malus pumila* Mill. (apple). Kings Co. 24 Sept. 1980-K.A.H. (ACAD 13632 coll. Kathleen Fuller).

Pluteus cervinus (Schaeff. ex Fr.) Kummer *in* Führ. in Pilzkd.:66. 1882.
Agaricus cervinus Schaeff. ex Fr.
Agaricus pluteus Batsch ex Fr.
Pluteus atricapillus (Secr.) Sing. (1975).
On hardwood logs and rotting wood. General. 1908-A.H.M. (KM-468, 469 *in* DAOM, K.A.H.) (L.E.W.-88, 525).

Pluteus chrysophlebius (Berk. & Rav.) Sacc. *in* Syll. Fung. 5:678. 1887.
Agaricus chrysophlebius Berk. & Rav.
Agaricus admirablis Pk.
Pluteus admirablis (Pk.) Pk.
Nolanea bruchii Speg.
On decaying log. Colchester Co. 20 July 1931-A.H.S., L.E.W. (W-679).

Pluteus granularis Pk. *in* Annu. Rep. N.Y. State Mus. 38:135. 1885.
From Kings Co. 26 Aug. 1933-K.A.H. (KM-470 *in* DAOM, fide A.H.S. as *P. granularis* var. *umbrosellus* Atk.).

Pluteus longistriatus (Pk.) Sacc. *in* Syll. Fung. 5:670. 1887.
Agaricus longistriatus Pk.
On rotten stump. Colchester Co. 8 July 1931-A.H.S., L.E.W. (W-590).

Pluteus tomentosulus (Pk.) Pk. *in* Annu. Rep. N.Y. State Mus. 32:28. 1879.
Singly on humus in spruce swamp. Colchester Co. 14 Aug. 1931-A.H.S., L.E.W. (W-750).

Pluteus umbrosus (Pers. ex Fr.) Kummer *in* Führ. in Pilzkd.:66. 1882.
Pluteus robertii (Fr.) Karst.
On rotten wood, generally coniferous. Colchester, Guysborough, Halifax and Kings Co. 26 Aug. 1931-A.H.S., L.E.W. (W-833) (KM-471, 472, 924, 4118, 5411 *in* DAOM, K.A.H.).

Podophacidium xanthomelum (Pers.) Kavina *in* Crypt. Czech. Exs.:217. 1936.
Humaria xanthomela Cke. var. *americana* (Rehm) Sacc. & Trott.
On mossy soil at base of *Fagus* sp. (beech). Colchester Co. 3 Sept. 1931-L.E.W. (W-1460, det. E.K.C.).

Podosphaera cladestina (Wallr. ex Fr.) Lév. *in* Ann. Sci. Nat. Bot., Sér. 3, 15:136. 1851.
Podosphaera oxyacanthae (DC. ex Mérat) de Bary.
Powdery mildew on *Amelanchier* sp. (wild pear), *Aronia melanocarpa* (Michx.) Elliott (black chokeberry), *Crataegus macrosperma* Ashe (hawthorn), *Prunus avium* L. (sweet cherry), *P. cerasus* L. (sour cherry), *P. pensylvanica* L.f. (pin cherry), *Spiraea alba* DuRoi (meadowsweet), *S. latifolia* (Ait.) Borkh. (meadowsweet) and *S. tomentosa* L. (steeple bush). General. 1909-W.P.F.

Podosphaera leucotricha (Ell. & Ev.) Salm. *in* Mem. Torrey Bot. Club 9:40. 1900.
Powdery mildew on *Malus pumila* Mill. (apple). Annapolis, Hants and Kings Co. 16 Aug. 1925-C.F.T.

Podostroma alutaceum (Pers. ex Fr.) Atk. *in* Bot. Gaz. 40:416. 1905.
On moss and duff under conifers. Colchester Co. 13 Aug. 1931-L.E.W. (W-1293 1293a, leg. A.H.S.).

Polymyxa graminis Ledingham *in* Can. J. Res., C., 17:50. 1939.
Isolated at Ottawa from soil, coll. in Kings Co. by D.L. Craig, in which *Triticum aestivum* L. (winter wheat, cv. Fredericks) was grown under controlled conditions. 1979-D.J.S.B. (Fungi Canadenses:199).

Polyozellus multiplex (Underw.) Murr. *in* North Am. Flora 9:171. 1910.
Cantharellus multiplex Underw.
Under mixed conifers. Kings Co. 10 Oct. 1932-K.A.H. (KM-188, fide A.H.S., 3999, 4000 coll. M. Weaver, 5133, 5384 *in* DAOM).

Polyporus abietinus (Dicks.) Fr. *in* Syst. Mycol. 1:370. 1821.
See *Hirschioporus abietinus* (Dicks. ex Fr.) Donk.

Polyporus adustus (Willd.) Fr. *in* Syst. Mycol. 1:363. 1821.
See *Bjerkandera adusta* (Willd. ex Fr.) Karst.

Polyporus albellus Pk. *in* Annu. Rep. N.Y. State Mus. 30:45. 1878.
See *Tyromyces albellus* (Pk.) Bond. & Sing.

Polyporus alveolarius (Bosc) Fr. *in* Syst. Mycol. 1:431. 1821.
Favolus alveolaris (DC. ex Fr.) Quél.
Favolus canadensis Klotzsch.
On *Fagus grandifolia* Ehrh. (beech). General. 1908-A.H.M. (KM-53a, 1566 *in* DAOM, K.A.H.) (L.E.W.-110, A.R.P. 6257 as *F. canadensis*).

Polyporus anceps Pk. *in* Bull. Torrey Bot. Club 22:207. 1895.
See *Dichomitus squalens* Reid.

Polyporus betulinus (Bull.) Fr. *in* Syst. Mycol. 1:358. 1821.
See *Piptoporus betulinus* (Bull. ex Fr.) Karst.

Polyporus biformis Fr. *in* Berkeley, Ann. Mag. Nat. Hist. 3:392. 1839.
See *Trametes cervina* (Schw.) Bres.

Polyporus brumalis (Pers.) Fr. *in* Syst. Mycol. 1:348. 1821.
Polyporellus brumalis (Pers.) Karst.
On *Betula* sp. (birch), *Fagus grandifolis* Ehrh. (beech), *Prunus pensylvanica* L.f. (pin cherry) and other dead wood. Pictou and Kings Co. 1908-A.H.M. (KM-3, 3a, 804, 1246 *in* DAOM, K.A.H.) (O-F2232).

Polyporus caeruleoporus Pk. *in* Annu. Rep. N.Y. State Mus. 26:68. 1874.
See *Albatrellus caeruleoporus* (Pk.) Pouz.

Polyporus caesius (Schrad.) Fr. *in* Syst. Mycol. 1:360. 1821.
See *Tyromyces caesius* (Schrad. ex Fr.) Murr.

Polyporus cinnabarinus (Jacq.) Fr. *in* Syst. Mycol. 1:371. 1821.
See *Pycnoporus cinnabarinus* (Jacq. ex Fr.) Karst.

Polyporus cinnamomeus (Jacq.) Fr. *in* Epicr. Syst. Mycol.:429. 1836-1838.
See *Coltricia cinnamomea* (Jacq. ex Fr.) Murr.

Polyporus compactus Overh. *in* Bull. Torrey Bot. Club 49:170. 1922.
On *Quercus* sp. 1975-L.P.M., J.M.M.

Polyporus conchifer (Schw.) Fr. *in* Elench. Fung.:96. 1828.
Poronidulus conchifer (Schw.) Murr.
On *Ulmus americana* L. (white elm) and *Ulmus* sp. Kings Co. 29 Dec. 1931-K.A.H. (KM-26, 794 *in* DAOM) (O-F2207).

Polyporus confluens (Alb. & Schw.) Fr. *in* Syst. Mycol. 1:355. 1821.
See *Albatrellus confluens* (Alb. & Schw. ex Fr.) Kotl. & Pouz.

Polyporus cristatus Pers. ex Fr. *in* Syst. Mycol.:356. 1821.
See *Albatrellus cristatus* (Schaeff. ex Fr.) Kotl. & Pouz.

Polyporus cuticularis (Bull.) Fr. *in* Syst. Mycol. 1:363. 1821.
See *Inonotus cuticularis* (Bull. ex Fr.) Karst.

Polyporus dichrous Fr. *in* Syst. Mycol. 1:364. 1821.
See *Gloeoporus dichrous* (Fr.) Bres.

Polyporus dryadeus (Pers.) Fr. *in* Syst. Mycol 1:374. 1821.
See *Inonotus dryadeus* (Pers. ex Fr.) Murr.

Polyporus elegans (Bull.) Fr. *in* Epicr. Syst. Mycol.:440. 1836-1838.
See *Polyporus varius* (Pers.) Fr.

Polyporus fagicola Murr. *in* Torreya 6:35. 1906.
See *Polyporus lentus* Berk.

Polyporus fibrillosus Karst. *in* Sydv. Finl. Polyp.:30. 1859.
See *Pycnoporellus fulgens* (Fr.) Donk

Polyporus frondosus (Dicks.) Fr. *in* Syst. Mycol. 1:355.1821.
See *Grifola frondosa* (Dicks. ex Fr.) S.F. Gray.

Polyporus fumosus Pers. ex Fr. *in* Syst. Mycol. 1:367. 1821.
See *Bjerkandera fumosa* (Pers. ex Fr.) Karst.

Polyporus glomeratus Pk. *in* Annu. Rep. N.Y. State Mus. 24:78. 1872.
On *Acer* sp. (maple) and *Fagus grandifolia* Ehrh. (beech). Colchester and Kings Co. 10 Aug. 1931-L.E.W. (W-1248) (O-F2223) (KM-5110 *in* DAOM, K.A.H.).

Polyporus griseus Pk. *in* Annu. Rep. N.Y. State Mus. 26:68. 1874.
See *Boletopsis grisea* (Pk.) Bond. & Sing.

Polyporus guttulatus Pk. *in* Annu. Rep. N.Y. State Mus. 33:37. 1880.
See *Tyromyces guttulatus* (Pk.) Murr.

Polyporus hirsutus Wulf. ex Fr. *in* Syst. Mycol. 1:367. 1821.
See *Coriolus hirsutus* (Wulf. ex Fr.) Quél.

Polyporus hirtus Quél. *in* Champ. Jura et Vosges:356. 1873.
See *Albatrellus hirtus* (Cke.) Donk.

Polyporus immitis Pk. *in* Annu. Rep. N.Y. State Mus. 35:135. 1884.
See *Tyromyces immitis* (Pk.) Bond.

Polyporus lentus Berk. *in* Smith, Engl. Fl. 5(2): 134. 1836.
Polyporus fagicola Murr.
Polyporus floccipes Rostk.
Polyporus squamosus Mich. ex Fr. var. *fagicola* (Murr.) Graff.
On *Fagus grandifolia* Ehrh. (beech). Colchester and Kings Co. 20 July 1931-L.E.W. (W-1092, 1092a det. J.L.L.) (KM-4234 *in* DAOM, K.A.H.).

Polyporus leptocephalus Fr. *in* Syst. Mycol. 1:349. 1821.
See *Polyporus varius* (Pers.) Fr.

Polyporus mollis Pers. ex Fr. *in* Syst. Mycol. 1:360. 1821.
See *Tyromyces mollis* (Pers. ex Fr.) Karst.

Polyporus montagnei Fr. apud Mont. *in* Ann. Sci. Nat. Bot., Sér. 2, 5:341. 1836.
See *Coltricia montagnei* (Fr. ex Mont.) Murr.

Polyporus nidulans Fr. *in* Syst. Mycol. 1:362. 1821.
See *Hapalopilus nidulans* (Fr.) Karst.

Polyporus osseus Kalchbr. *in* Matem. Term. Közlem. 3:217. 1865.
See *Osteina obducta* (Berk.) Donk.

Polyporus ovinus Schaeff ex Fr. *in* Syst. Mycol. 1:346. 1821.
See *Albatrellus ovinus* (Schaeff. ex Fr.) Kotl. & Pouz.

Polyporus pargamenus Fr. *in* Epicr. Syst. Mycol.:480. 1836-1838.
See *Hirschioporus pargamenus* (Fr.) Bond. & Sing.

Polyporus perennis L. ex Fr. *in* Syst. Mycol. 1:350. 1821.
See *Coltricia perennis* (L. ex Fr.) Mich. ex S.F. Gray

Polyporus picipes Fr. *in* Epicr. Syst. Mycol.:440. 1836-1838.
On decaying or buried wood. Colchester, Pictou and Kings Co. 1908-A.H.M. (KM-4a to c, 788, 1238 *in* DAOM, K.A.H.). (O-F2902, 2903).

Polyporus pubescens Schum. ex Fr. *in* Syst. Mycol. 1:367. 1821, var. **grayii** Cke. & Ell. *in* Ellis & Everhart, North Am. Fungi:1933. 1888.
See *Coriolus pubescens* (Schum. ex Fr.) Quél.

Polyporus radiatus Sow. ex Fr. *in* Syst. Mycol. 1:369. 1821.
See *Inonotus radiatus* (Sow. ex Fr.) Karst.

Polyporus resinosus Schrad. ex Fr. *in* Syst. Mycol. 1:361. 1821.
See *Ischnoderma benzoinum* (Wahl.) Karst.

Polyporus salignus Fr. *in* Epicr. Syst. Mycol.:452. 1836-1838.
See *Bjerkandera fumosa* (Pers. per Fr.) Karst.

Polyporus schweinitzii Fr. *in* Syst. Mycol. 1:351. 1821.
See *Phaeolus schweinitzii* (Fr.) Pat.

Polyporus semipileatus Pk. *in* Annu. Rep. N.Y. State Mus. 34:43. 1881.
See *Incrustoporia semipileata* (Pk.) Donk.

Polyporus semisupinus Berk. & Curt. *in* Grevillea 1:50. 1872.
See *Tyromyces semisupinus* (Berk. & Curt.) Murr.

Polyporus squamosus Mich. ex Fr. *in* **squamosus.** *in* Syst. Mycol. 1:343. 1821.
On *Acer* sp. (maple) and *Ulmus* sp. (elm). Kings Co. Aug. 1934-K.A.H.

Polyporus squamosus Mich. ex Fr. var. **fagicola** (Murr.) Graff. *in* Mycologia 28:166. 1936.
See *Polyporus lentus* Berk.

Polyporus sulphureus Bull. ex Fr. *in* Syst. Mycol. 1:357. 1821.
See *Laetiporus sulphureus* (Fr.) Murr.

Polyporus tomentosus Fr. var. **tomentosus.** *in* Syst. Mycol. 1:351. 1821.
See *Mucronoporus tomentosus* Ell. & Ev.

Polyporus tomentosus Fr. var. **circinatus** (Fr.) Sart. & Maire *in* Assoc. Fr. Sci. Congr. Montpellier:779. 1922.
See *Mucronoporus circinatus* Ell. & Ev.

Polyporus tsugae (Murr.) Overh. *in* Ann. Mo. Bot. Gard. 2:714. 1915.
See *Ganoderma tsugae* Murr.

Polyporus tulipiferae (Schw.) Overh. *in* Wash. Univ. Stud. 3, 1:29. 1915.
See *Irpex lacteus* (Fr. per Fr.) Fr.

Polyporus umbellatus Pers. ex Fr. *in* Syst. Mycol. 1:354. 1821.
See *Grifola umbellatus* (Pers. ex Fr.) Pilát.

Polyporus varius (Pers.) Fr. *in* Syst. Mycol. 1:352. 1821.
Polyporus elegans (Bull.) Fr.
Polyporus leptocephalus (Jacq.) Fr.
On *Acer saccharum* Marsh. (sugar maple), *Acer spp.*, *Alnus* sp. (alder), *Betula* sp. (birch), *Fagus grandifolia* Ehrh. (beech), *Malus pumila* Mill. (apple), *Populus tremuloides* Michx. (trembling aspen), *Salix* sp. (willow) and *Tsuga canadensis* (L.) Carr. (hemlock). Colchester, Halifax, Hants, Kings and Pictou Co. 1880-J.S. (A.R.P. -6273) (L.E.W.-112, 216, 552a) (KM-23a, 56, 770, 791, 1242, 4259, 4260 *in* DAOM, K.A.H.) (O-F2219, 2968, 2969, 5494, 7208).

Polyporus versicolor L. ex Fr. *in* Syst. Mycol. 1:368. 1821.
See *Coriolus versicolor* (L. ex Fr.) Quél.

Poria aestivale Overh. *in* Pa. Agric. Exp. Stn. Tech. Bull. 418:20. 1942.
On *Fagus grandifolia* Ehrh. (beech). 1975-L.P.M., J.M.M.

Poria ambigua Bres. *in* Atti R. Accad. Sci. Lett. Arti. Agiati Rovereto (3) 3:84. 1897.
See *Oxyporus late-marginatus* (Dur. & Mont. ex Mont.) Donk.

Poria aneirina (Sommerf.) Cke. *in* Grevillea 14:112. 1886.
Antrodia serena Karst.
Polyporus aneirinus Sommerf.
On wood of deciduous trees. Hants Co. 31 Oct. 1976-W.S. (WS-318 *in* ACAD).

Poria cinerascens Bres. apud Strasser *in* Rhfl. Sonntagb. 3:361. 1900.
See *Poria lindbladii* (Berk.) Cke.

Poria cocos (Schw.) Wolf *in* J. Elisha Mitchell Sci. Soc. 38:134. 1922.
On *Betula lutea* Michx. f. (yellow birch). 1952. (For. Insect Dis. Surv.:20. 1952).

Poria corticola (Fr.) Cke. *in* Grevillea 14:113. 1886.
See *Oxyporus corticola* (Fr.) Ryv.

Poria crustulina Bres. *in* Mycologia 17:75. 1925.
On *Abies balsamea* (L.) Mill. (balsam fir), *Acer rubrum* L. (red maple), *Picea mariana* (Mill.) BSP. (black spruce), *P. rubens* Sarg. (red spruce) and *Picea* sp. Kings and Colchester Co. 8 Aug. 1929-L.E.W. (W-234) (ACAD 1836).

Poria elongata Overh. *in* Pa. Agric. Exp. Stn. Tech. Bull. 418:28. 1942.
On *Betula* sp. (birch) and *Fagus* sp. (beech). Kings Co. 6 Oct. 1976-W.P.S. (WS-239 *in* ACAD).

Poria eupora (Karst.) Cke. *in* Grevillea 14:110. 1886.
See *Junghuhnia nitida* (Pers. ex Fr.) Ryv.

Poria ferrea (Pers.) Bourd. & Galz. *in* Bull. Soc. Mycol. Fr. 41:247. 1925.
See *Phellinus ferreus* (Pers.) Bourd. & Galz.

Poria ferruginosa (Schrad. ex Fr.) Karst. *in* Rev. Mycol. 3(9):19. 1881.
See *Phellinus ferruginosus* (Schrad. ex Fr.) Bourd. & Galz.

Poria incarnata Pers. *in* Dispositio:70. 1794.
See *Poria placenta* (Fr.) Cke.

Poria laevigata (Fr.) Karst. *in* Bidr. Finl. Nat. Folk. 37:82. 1882.
See *Phellinus laevigatus* Bourd. & Galz.

Poria late-marginata (Dur. & Mont.) Cke. *in* Grevillea 14:109. 1886.
See *Oxyporus late-marginatus* (Dur. & Mont. ex Mont.) Donk.

Poria lenis (Karst.) Sacc. *in* Syll. Fung. 6:313. 1888.
Polyporus vulgaris Fr.
Poria vulgaris Fr.
On *Abies balsamea* (L.) Mill. (balsam fir), *Populus* sp. (poplar), *Tsuga* sp. (hemlock) and other coniferous wood. Colchester and Kings Co. 1881-J.S. (A.H.M.) (L.E.W.-338 det. D.V.B.) (KM-2223, 3096 *in* DAOM, K.A.H. det. R.M.L.).

★**Poria lindbladii** (Berk.) Cke. *in* Grevillea 14:109. 1886.
Poria cinerescens Bres.
On *Abies balsamea* (L.) Mill. (balsam fir), *Betula papyrifera* Marsh. (white birch) and *Picea* sp. (spruce). Kings Co. 18 Oct. 1951-K.A.H. (KM-1373, 2233 *in* DAOM, det. R.M.) (ACAD 1373).

Poria medulla-panis (Pers.) Fr. *in* Syst. Mycol. 1:380. 1821.
See *Perenniporia medula-panis* (Jacq. per Fr.) Donk.

Poria nigrescens Bres. *in* Atti R. Accad. Sci. Lett. Arti. Agiati Rovereto (3)3:83. 1897.
See *Rigidoporus nigrescens* (Bres.) Donk.

Poria pannocincta (Rom.) Lowe *in* N.Y. State Coll. For Tech. Publ. 65:55. 1946.
See *Gloeoporus pannocinctus* (Rom.) Erikss.

Poria placenta (Fr.) Cke. *in* Grevillea 14:109. 1886.
Polyporus incarnatus Fr.
Poria incarnata Pers.
Reported as *Polyporus incarnatus* on *Salix* sp. (willow). Halifax and Pictou Co. 1881-J.S. (A.H.M.) (an uncertain collection-L.E.W.).

Poria prunicola (Murr.) Sacc. & Trott. *in* Syll. Fung. 21:331. 1912.
See *Phellinus prunicola* (Murr.) Gilbertson.

Poria punctata (Fr.) Karst. *in* Bidr. Finl. Nat. Folk 37:83. 1882.
See *Phellinus punctatus* (Fr.) Pilát.

Poria rixosa Karst. *in* Rev. Mycol. 3(9):19. 1881.
See *Junghuhnia collabens* (Fr.) Ryv.

Poria sanguinolenta (Alb. & Schw.) Cke. *in* Grevillea 14:109. 1886.
On rotted coniferous and deciduous wood. Kings Co. 8 Oct. 1976-W.P.S. (WS-258 *in* ACAD).

Poria semitincta (Pk.) Cke. *in* Grevillea 14:115. 1886.
Poria tarda (Berk.) Cke.
On *Acer saccharum* Marsh. (sugar maple), *Betula lutea* Michx. f. (yellow birch), *Betula* sp., coniferous and deciduous wood, *Fagus grandifolia* Ehrh. (beech) and *Populus* sp. (poplar). Colchester Co. 1 Aug. 1931-L.E.W. (W-1206, 1246).

Poria sericeomollis (Rom.) Egel. *in* Nytt. Mag. Naturvidensk. 52:123-171. 1914.
Poria sericeomollis (Rom.) Baxter (Pap. Mich. Acad. Sci. Arts Lett. 6:72. 1926).
See *Strangulidium sericeomollis* (Rom.) Pouz.

Poria similis Bres. *in* Mycologia 17:76. 1925.
On *Populus balsamifera* L. (balsam poplar). 1975-L.P.M., J.M.M.

Poria sinuosa (Fr.) Cke. *in* Grevillea 14:113. 1886.
See *Antrodia sinuosa* (Fr.) Karst.

Poria subacida (Pk.) Sacc. *in* Syll. Fung. 6:325. 1888.
See *Perenniporia subacida* (Pk.) Donk.

Poria subiculosa (Pk.) Cke. *in* Grevillea 14:114. 1886.
See *Inonotus subiculosus* (Pk.) Erikss. & Strid.

Poria subincarnata (Pk.) Murr. *in* Mycologia 13:86. 1921.
See *Incrustoporia subincarnata* (Pk.) Domanski.

Poria tarda (Berk.) Cke. *in* Grevillea 14:109. 1886.
See *Poria semitincta* (Pk.) Cke.

Poria unita (Pers.) Karst. *in* Bidr. Finl. Nat. Folk 37:81. 1882.
See *Perenniporia medulla-panis* (Jacq. per Fr.) Donk.

*__Poria vaillantii__ (DC. per Fr.) Cke. *in* Grevillea 14:112. 1886.
Boletus vaillantii DC. (1815).
Fibroporia vaillantii (DC. ex Fr.) Parm. (1968).
Polyporus vaillantii DC. ex Fr. (1821).
On *Picea* sp. (spruce). Halifax Co. 14 Sept. 1959-K.A.H. (KM-4209 *in* DAOM).

Poria vulgaris (Fr.) Cke. sensu Romell *in* Sven. Bot. Tidskr. 20. 1926.
See *Poria lenis* (Karst.) Sacc.

Poria xantha (Fr. ex Fr.) Cke. *in* Grevillea 14:112. 1886.
Amyloporia xantha (Fr.) Bond. & Sing. (not valid publication, fide Donk).
On *Populus* sp. (poplar) and coniferous wood. Colchester Co. 13 Aug. 1931-L.E.W. (W-1298) (KM-3107 *in* DAOM, K.A.H.).

Poria xylostromatoides (Berk.) Cke. *in* Grevillea 14:114. 1886.
On coniferous and deciduous wood. Kings Co. 6 Oct. 1976-W.P.S. (WS-243 *in* ACAD).

Poria sp.
On well-rotted wood of *Picea* sp. (spruce) and *Pinus* sp. (pine). Kings Co. 12

Oct. 1976-W.P.S. (WS-273, 283, 285 *in* ACAD as *P. dendro-incrustata* nom. prov. M.Sc. Thesis, 1977).

Porotheleum fimbriatum (Pers. ex Fr.) Fr. *in* Syst. Orb. Veg. 80. 1825.
See *Stromatoscypha fimbriata* (Pers. ex Fr.) Donk.

Pouzarella dysthales (Pk.) Mazzer *in* Monogr. Stud. of the Genus *Pouzarella*:105. 1976.
Entoloma dysthales Pk.
Nolanea dysthales (Pk.) Atk.
Rhodophyllus dysthales (Pk.) Romagn. (Singer 1975).
On humus. Colchester Co. 21 Aug. 1931-A.H.S., L.E.W. (W-806).

Propolis faginea (Schrad. ex Fr.) Karst. *in* Bidr. Finl. Nat. Folk 19 (Mycol. Fenn. 1): 24. 1871.
On *Fagus grandifolia* Ehrh. (beech), *Populus tremuloides* Michx. (trembling aspen) and *Quercus* sp. (oak). Colchester and Kings Co. 14 July 1929-L.E.W. (W-57, 218, 316, 470, 1665) (O-4634 det. H.T.G.) (KM-3084 *in* DAOM K.A.H.).

Propolis leonis (Tul.) Rehm *in* Ascomycetens:360. 1877.
On *Picea* sp. (spruce). Colchester Co. 4 July 1931-L.E.W. (W-485, 1063, 1479).

Prosthecium innesii (Curr.) Wehm. *in* Univ. Mich. Stud. Sci., Ser. 14:98. 1941.
On *Acer pseudoplatanus* L. (sycamore maple). Kings Co. 4 May 1953-D.W.C.

Prosthecium stylosporum (Ell. & Ev.) Wehm. *in* Univ. Mich. Stud. Sci., Ser. 14:101. 1941.
Pseudovalsa stylospora Ell. & Ev.
On *Acer saccharum* Marsh. (sugar maple) and *A. spicatum* Lam. (mountain maple). Colchester and Kings Co. 25 June 1926-L.E.W. (W-46, 1571) (P371, 371a,b).

Prosthemiella formosa Sacc. & Malbr. *in* Michelia 2:356. 1881.
On old sphaeriaceous stromata on *Fagus grandifolia* Ehrh. (beech). Colchester Co. Sept. 1931-L.E.W. (W-1461).

Protoventuria fimiseda (Mouton) Barr. *in* Can. J. Bot. 49:1960. 1971.
Antennularia fimiseda (Mouton) Barr.
Venturia fimiseda Mouton.
On dung. 1934-R.F.C. (Cain 44111, TRTC).

Protoventuria maculosa (Ell.) Barr. *in* Can. J. Bot. 49:1960. 1971.
Antennularia maculosa (Ell.) Barr.
Venturia maculosa Ell.
On leaves of *Nemopanthus mucronata* (L.) Trel. (false holly). Richmond Co. 3 Aug. 1931-L.E.W. (W-1236 as *V. curviseta* Pk.)

Psathyrella acadiensis A.H. Smith *in* Mem. N.Y. Bot. Gard. 24:364. 1972.
On well-rotted log of *Betula* sp. (birch). 1972-A.H.S. (MICH typus Harrison 8120).

Psathyrella candolleana (Fr.) Maire var. **candolleana** *in* Mem. Soc. Sci. Nat. Maroc. 45:113. 1937.
Hypholoma candolleanum (Fr.) Quél.
From Kings Co. 12 Sept. 1931-K.A.H. (KM-315-317, 917, 5388 *in* DAOM).

Psathyrella conissans (Pk.) A.H. Smith *in* Mem. N.Y. Bot. Gard. 24:242. 1972.
Psilocybe conissans (Pk.) Pk.
Near *Betula* sp. (birch) and on *Populus* sp. (poplar). Guysborough, Halifax and Kings Co. 21 Aug. 1932-K.A.H. (KM-475, 477, 991, 1717, 4135, 4136 *in* DAOM, fide A.H.S.).

Psathyrella delineata (Pk.) A.H. Smith *in* Contrib. Univ. Mich. Herb. 5:59. 1941.
Hypholoma delineatum Pk.
On rotten log. Kings Co. 1 Sept. 1930-K.A.H. (KM-319, 320 *in* DAOM, fide A.H.S.).

Psathyrella foenisecii (Fr.) A.H. Smith *in* Mem. N.Y. Bot. Gard. 24:32. 1972.
Panaeolina foenisecii (Fr.) Maire.
Psilocybe foenisecii (Fr.) Quél.
From Cape Breton and Halifax Co. 1881-J.S. (A.H.M.).

Psathyrella fuscofolia (Pk.) A.H. Smith *in* Mem. N.Y. Bot. Gard. 24:362. 1972.
On soil or decaying wood in woods or open places. Pictou Co. 14 Oct. 1968-K.A.H. (MICH Harrison 8385).

Psathyrella gracilis (Fr.) Quél. var. **gracilis** *in* Champ. Jura et Vosges:152. 1872.
On cow dung from Halifax Co. 1880-J.S. (A.H.M.) (MICH, L.E.W.-597).

Psathyrella harrisonii A.H. Smith *in* Mem. N.Y. Bot. Gard. 24:235. 1972.
On soil at edge of bog. Kings Co. 4 July 1966-K.A.H. (MICH Typus Harrison 7659).

Psathyrella hydrophila (Fr.) Maire *in* Mem. Soc. Sci. Nat. Maroc. 45:113. 1937.
Hypholoma hydrophilus (Fr.) Quél.
Hypholoma hydrophilum Fr. sensu Ricken.
At base of stump of *Fagus* sp. (beech). Colchester Co. 2 Sept. 1931-A.H.S., L.E.W. (W-859) (KM-2733 *in* DAOM det. S. Hoare) (KM-2732 on *Acer* sp. (maple) *in* DAOM, probably this species).

Psathyrella incerta (Pk.) A.H. Smith *in* Mem. N.Y. Bot. Gard. 24:86. 1972.
Hypholoma incertum (Pk.) Sacc.
On hardwood debris. Colchester Co. 8 July 1931-A.H.S., L.E.W. (MICH Smith 646; Wehmeyer 592).

Psathyrella obtusata (Fr.) A.H. Smith *in* Contrib. Univ. Mich. Herb. 5:55. 1941.
Psilocybe obtusata (Fr.) *Kummer.*
On old sawdust pile. Victoria Co. 22 Sept. 1968-K.A.H. (MICH Harrison 8023).

Psathyrella polycephala (Fr.) A.H. Smith *in* Mem. N.Y. Bot. Gard. 24:253-254. 1972.
Psathyrella cernua (Vahl. ex Fr.) Moser.
Psilocybe cernua (Fr.) Quél.
Under *Salix* sp. (willow). Halifax Co. 1908-A.H.M. (European species not generally recognized in N.A.).

Psathyrella septentrionalis A.H. Smith var. **septentrionalis** *in* Mem. N.Y. Bot. Gard. 24:90-91. 1972.
On hardwood logs. Guysborough Co. 12 Oct. 1969-K.A.H. (MICH Harrison 8743).

Psathyrella spadicea (Schaeff. ex Fr.) Sing. *in* Lilloa 22:468. 1951.
Psilocybe spadicea (Fr.) Kummer.
From Halifax and Pictou Co. 1908-A.H.M.

Psathyrella spadiceogrisea (Fr.) Maire *in* Mem. Soc. Sci. Nat. Maroc. 45:113. 1937.
Psathyra spadiceogrisea (Fr.) Kummer.
From Pictou Co. 1908-A.H.M.

Pseudeurotium zonatum van Beyma *in* Zentralbl. Bakt. Parasitkd., Abt. 2, 96:416. 1937.
From soil. Cumberland Co. 1980-D.B., A.T.

★**Pseudogymnoascus roseus** Raillo *in* Zentralbl. Bakt. Parasitkd. Abt. 2, 78:520. 1929.
Cultured from roots of *Fragaria* sp. (cultivated strawberry) and from soil. Colchester and Lunenburg Co. 8 May 1978-C.O.G. (DAOM 169157).

Pseudohydnum gelatinosum (Fr.) Karst. *in* Not. Sällsk. Fauna Flora Fenn. 9:374. 1868.
Tremellodon gelatinosum (Pers.) Fr.
On decaying logs and stumps. Guysborough, Kings and Victoria Co. 1928-K.A.H. (KM-150, 981, 5150 *in* DAOM) (5 Aug. 1931, L.E.W.-1215).

★**Pseudomassaria** sp. (*Pseudomassaria* Jacz. *in* Bull. Herb. Boiss. 2:663. 1894).
Undetermined species on leaves of *Rhododendron* sp. Kings Co. 7 Sept. 1972-C.O.G., K.A.P. (DAOM 147601).

★**Pseudoomphalina felloides** (Kauff.) Sing. *in* Sydowia Ann. Mycol. 15:52. (1961) 1962.
Cantharellula felleoides (Kauff.) Sing.
Clitocybe felleoides Kauff.
In wooded ravine. Kings Co. 22 Sept. 1953-K.A.H. (KM-2571 *in* DAOM).

Pseudopeziza medicaginis (Lib.) Sacc. *in* Syll. Fung. 8:724. 1889.
On *Medicago sativa* L. (alfalfa). General. 14 May 1925-J.F.H.

Pseudopeziza salicis (Tul.) Poteb. *in* Ann. Mycol. 8:79. 1910.
See *Drepanopeziza salicis* (Tul.) Höhn.

Pseudopeziza trifolii (Biv.-Bern.) Fckl. *in* Symb. Mycol.:290. 1869.
On *Trifolium pratense* L. (red clover). General. 20 July 1925-W.K.M.

Pseudoplea trifolii (Rostr.) Petrak *in* Ann. Mycol. 19:29. 1921.
On *Medicago sativa* L. (alfalfa). Kings Co. 18 May 1925-J.F.H.

Pseudoplectania fulgens (Pers.) Fckl. *in* Symb. Mycol.:324. 1869.
Caloscypha fulgens (Pers.) Boud.
Lamprospora fulgens (Pers.) Snyder.
From Pictou Co. 1908-A.H.M. (as *Peziza fulgens* Pers.)

Pseudoplectania nigrella (Pers. ex Fr.) Fckl. *in* Symb. Mycol.:324. 1869.
On leaf mold. Annapolis Co. 18 May 1934-K.A.H. (KM-1113, 1190 *in* DAOM).

Pseudoplectania melaena (Fr.) Sacc. *in* Syll. Fung. 8:165. 1889.
Pseudoplectania vogesiaca (Pers.) Seav. (Ref. Can. Field-Nat. 68:7. 1954).
On *Abies* sp. (fir). Kings Co. 20 April 1934-K.A.H. (KM-1114, 1115, 1191, 1192 *in* DAOM).

Pseudotrichia viridicoma (Cke. & Pk.) Wehm. *in* Can. J. Res., C. 20:579. 1942.
Lasiosphaeria viridicoma Sacc.
Sphaeria viridicoma Cke. & Pk.
On decayed stromata of various pyrenomycetes or on wood infected by these fungi. Colchester Co. 12 Aug. 1931-L.E.W. (W-1174).

Pseudovalsa longipes (Tul.) Sacc. *in* Michelia 1:463. 1879.
On *Quercus rubra* L. (red oak). Halifax Co. 8 Sept. 1933-L.E.W. leg. A.R.P.

Pseudovalsa stylospora Ell. & Ev. *in* Proc. Acad. Nat. Sci. Phila.:223. 1890.
See *Prosthecium stylosporus* (Ell. & Ev.) Wehm.

Psilocybe acadiensis A.H. Smith *in* Smith & Hesler, J. Elisha Mitchell Sci. Soc. 62:192. 1946.
Psilocybe crobula (Fr.) Lange & Sing., fide S.A. Redhead.
Scattered on decaying stems of *Epilobium* sp. (willow-herb). Colchester Co. 13 July 1931-A.H.S., L.R. Hesler (L.E.W.-618 type).

Psilocybe semilanceata (Fr.) Kummer *in* Führ. in Pilzkd.:71. 1871.
Geophila semilanceata (Fr.) Quél.
Abundant under *Picea* sp. (spruce). Halifax Co. 1888-J.S. (A.H.M.) (ACAD 13617 coll. Brian Levy, 25 Sept. 1980).

Psilopezia aquatica (DC.) Rehm *in* Saccardo & D. Saccardo, Syll. Fung. 18:12. 1906.
On rotten *Betula* sp. (birch). Kings Co. 8 Sept. 1933-K.A.H. (KM-1193 *in* DAOM).

Psilopezia hydrophila (Pk.) Seav. *in* North Am. Cup-Fungi (Operculates): 106.1928.
On submerged wood of *Alnus* sp. (alder). Kings Co. 25 June 1932-K.A.H. (KM-1194, 1197 *in* DAOM).

Psilopezia nummularia Berk. *in* Hooker, Lond. J. Bot. 6:325. 1847.
On rotten water-soaked wood. Kings Co. 10 July 1931-K.A.H. (KM-1195, 1196 *in* DAOM).

Puccinia acetosae (Schum.) Körn. *in* Hedwigia 15:184. 1876.
On *Rumex acetosella* L. (sheep sorrel). Kings and Pictou Co. 1913-W.P.F.

Puccinia andropogonis Schw. *in* Trans. Am. Philos. Soc. 2, 4:295. 1832, var. **melampyri** Arth. *in* Manual of the Rusts in the U.S. and Can.:121. 1934.
On *Melampyrum lineare* Desr. (cow wheat). Cumberland Co. 24 July 1936-J.F.H.

Puccinia andropogonis Schw. var. **onobrychilis** (Burr.) Arth. *in* Manual of the Rusts in the U.S. and Can.:122. 1934.
On *Lupinus perennis* L. (wild lupine). 1934-J.C.A.

Puccinia angustata Pk. *in* Bull. Buffalo Soc. Nat. Sci. 1:67. 1873.
On *Lycopus americanus* Muhl. (water-horehound), *L. uniflorus* Michx. (bugleweed), *Mentha arvensis* L. (field mint), *Scirpus cyperinus* (L.) Kunth. var. *pelius* Fern. (bulrush), *S. pedicellatus* Fern. and *S. rubrotinctus* Fern. General. 1913-W.P.F.

Puccinia antirrhini Diet. & Holw. *in* Dietel, Hedwigia 36:298. 1897.
On *Antirrhinum majus* L. (snapdragon). General. 1930-J.F.H.

Puccinia arenariae (Schum.) Wint. *in* Hedwigia 19:38. 1880.
On *Arenaria peploides* L. (sandwort), *A. peploides* var. *robusta* Fern. (seabeach-sandwort), *Spergula arvensis* L. (corn spurrey). General. 23 Aug. 1926-J.F.H.

Puccinia asparagi DC. *in* Flore Fr. 2:595. 1805.
On *Asparagus officinalis* L. var. *altilis* (asparagus). Kings Co. 29 Sept. 1939-J.F.H.

Puccinia asteris Duby *in* Bot. Gall. 2:888. 1830.
On *Aster acuminatus* Michx. (wood aster), *A. lateriflorus* (L.) Britt. (calico aster) and *A. macrophyllus* L. (large-leaved aster). General. 1913-W.P.F. (O-1880, 4964, 4970, 5125).

Puccinia bardanae (Wallr.) Cda. *in* Icon. Fung. 4:17. 1840.
On *Arctium minus* (Hill) Bernh. (common burdock). Kings and Pictou Co. 1913-W.P.F. (O-4962).

Puccinia bolleyana Sacc. *in* Syll. Fung. 9:303. 1891.
On *Carex intumescens* Rudge (sedge), *C. lurida* Wahlenb. (sedge) and *Sambucus canadensis* L. (common elder). Pictou Co. 1913-W.P.F.

Puccinia calcitrapae DC. *in* Flore Fr. 2:221. 1805.
Puccinia cirsii Lasch.
On *Cirsium muticum* Michx. (swamp-thistle). Inverness Co. Aug. 1956-D.B.O.S.

★**Puccinia campanulae** Carm. *in* Berkeley & Smith, Engl. Flora 5(2):356. 1836.
On *Campanula rotundifolia* L. (harebell or bluebell). Kings Co. Oct. 1978-Andrew Jamison, K.A.H., C.O.G.

Puccinia caricina DC. *in* Flore Fr. 5:60. 1815.
On *Carex arctata* Boott (sedge), *C. brunnescens* (Pers.) Poir., *C. crinita* Lam., *C. debilis* var. *rudgei* Bailey, *C. disperma* Dew., *C. intumescens* Rudge, *C. paleacea* Wahlenb., *C. pallescens* L. var. *neogaea* Fern., *C. plantaginea* Lam., *Ribes glandulosum* Grauer (skunk-currant), *R. hirtellum* Michx. (gooseberry), *R. lacustre* (Pers.) Poir. and *R. oxyacanthoides* L. (wild gooseberry). General. 1913-W.P.F.

Puccinia caricis DC. var. **uniporula** (Orton) Arth. *in* Manual of the Rusts in the U.S. and Can.:209. 1934.
On *Carex arctata* Boott (sedge) and *C. flexuosa* Muhl. Kings Co. 11 Sept. 1944-R.M.L., J.F.H. (25 Aug. 1952-D.W.C., D.B.O.S.).

Puccinia caricis DC. var. **urticata** (Kern) Arth. *in* Manual of the Rusts in the U.S. and Can.:208. 1934.
On *Carex paleacea* Wahl. (sedge). Kings Co. 11 Aug. 1942-R.M.L.

Puccinia caricis-shepherdiae Davis *in* Trans. Wis. Acad. Sci. Arts Lett. 21:301. 1924.
On leaves of *Carex* sp. (sedge). 22 Sept. 1928-J.F.H.

Puccinia centaureae DC var. **centaureae** *in* Flore Fr. 5:59. 1815.
On *Centaurea nigra* L. (knapweed). Kings and Lunenburg Co. 28 July 1965-D.B.O.S. 4908 (DAOM).

Puccinia cicutae Lasch *in* Klotzsch, Herb. Viv. Mycol.:787. 1845.
On *Cicuta maculata* L. (water hemlock). Colchester, Kings and Pictou Co. 1913-W.P.F. (O-4965) (L.E.W.-1442).

Puccinia circaeae Pers. *in* Neues Mag. Bot. 1:119. 1794; Syn. Fung.:228. 1801.
On *Circaea alpina* L. (small enchanter's-nightshade), *C. canadensis* Hil. (nightshade) and *C. quadrisulcata* (Maxim.) Franch. & Sav. var. *canadensis* (L.) Hara (large enchanter's-nightshade). General. 1913-W.P.F. (O-5225) (L.E.W.-1453).

Puccinia cnici Mart. *in* Prodr. Fl. Mosq., ed. 2:227. 1817.
On *Cirsium vulgare* (Savi) Tenore (bull thistle). Digby, Lunenburg and Kings Co. 1950-L.E.W. (O-4950, 4956, coll. A.E.R.).

Puccinia convolvuli (Pers.) Cast. *in* Observations sur quelques Plantes Acotyledonées 1:16. 1842.
On *Convolvulus sepium* L. (hedge bindweed). Kings Co. 7 July 1938-J.F.H.

Puccinia coronata Cda. var **coronata** *in Icon. Fung. 1:6. 1837.*
On Agropyron repens (L.) Beauv. (couchgrass), *Avena sativa* L. (oat), *Calamagrostis canadensis* (Michx.) Nutt. (bluejoint grass), *Holcus lanatus* L. (velvet grass), *Lolium perenne* L. (perennial rye-grass; 18 Sept. 1981-C.O.G., R.W.D.) *Phalaris arundinacea* L. (reed canary-grass), *Rhamnus alnifolia* L'Her. (drawf alder), *R. cathartica* L. (European buckthorn) and *R. frangula* L. (alder buckthorn). General. 1913-W.P.F. (O-4963, 4980, 5092, 5852) (DAOM 181680, 181681).

Puccinia coronata Cda. f. sp. **agrostis** Erikss. *in* Ber. Dtsch. Bot. Ges. 12(9):292-331. 1894.
On *Agrostis tenuis* Sibth. (bent-grass or brown-top) and *Rhamnus frangula* L. (alder buckthorn). Kings Co. 1952-J.A.P., D.W.C.

Puccinia coronata Cda. f. sp. **avenae** Erikss. *in* Ber. Dtsch. Bot. Ges. 12(9):292-331. 1894. (see also *P. coronata* var. avenae Fraser & Ledingham Sci. Agric. 13: 314 & 332. 1933 on *Avena*).
On *Rhamnus cathartica* L. (common buckthorn). General. 12 June 1925-J.F.H.

Puccinia cyani Pass. *in* Rabenhorst Fung. Eur. Exs.:1767. 1874.
On *Centaurea cyanus* L. (bachelor's-button). Kings Co. 18 Oct. 1938-J.F.H.

Puccinia dioicae Magn. *in* Amtl. Ber. 50 Versamml. Naturf. Arzte Munchen: 199. 1877.
On *Aster acuminatus* Michx. (wood aster), *A. umbellatus* Mill. (tall white aster), many species of *Carex* (sedges), *Lactuca biennis* (Moench) Fern. (blue wild lettuce), *L. canadensis* L. (devils weed), *L. sativa* L. (lettuce), *Solidago altissima* L. (tall goldenrod), *S. bicolor* L. (white goldenrod), *S. canadensis* L. (Canada goldenrod), *S. graminifolia* (L.) Salisb. (narrow-leaved goldenrod), *S. puberula* Nutt. (rough goldenrod) and *S. rugosa* Ait. (rough goldenrod). General. 1912-W.P.F.

Puccinia distichlidis Ell. & Ev. *in* Proc. Acad. Nat. Sci. Phila. 1893:152. 1893.
On *Spartina pectinata* Link (broad-leaf cord-grass). Kings Co. 27 Sept. 1928-J.F.H. (DAOM 19157, 173754).

Puccinia drabae Rud. *in* Linnaea 4:115. 1829.
On stems of *Draba norvegica* Gunn. var. *clivicola* (Fern.) Boivin. Victoria Co. 12 July 1952-J.S.E., D.W.C.

Puccinia eleocharidis Arth. *in* Bull. Iowa Agric. Coll. Dep. Bot. 1884:156. 1884.
On *Eleocharis* sp. (spike-rush), *Eupatorium perfoliatum* L. (boneset) and *E. maculatum* L. (joe-pye-weed). General. 1913-W.P.F.

Puccinia fraseri Arth. *in* Bull. Torrey Bot. Club 42:591. 1915.
On *Hieracium caespitosum* Dumort. (antidates *H. pratense* Tausch fide A.E.R.) (hawkweed or kingdevil) and *H. scabrum* Michx. (rough hawkweed). General. 6 June 1910-W.P.F. (O-4966) (DAOM 12789, 12790, 12794, 12795 isotype, 12796, 12797, 12799, 12800).

Puccinia graminis Pers. var. **graminis** *in* Neues Mag. Bot. 1:119. 1794; Syn. Fung.: 228. 1801.
On *Agropyron repens* (L.) Beauv. (couch grass), *Agrostis alba* L. (red top), *A. palustris* Huds. (creeping bent grass), *A. perennans* (Walt.) Tuckerm. (upland bent grass), *Anthoxanthum odoratum* L. (sweet vernal-grass), *Avena sativa* L. (oat), *Berberis vulgaris* L. (common barberry), *Hordeum jubatum* L. (fox-tail barley), *H. vulgare* L. (barley), *Poa* spp. (bluegrass), *Secale cereale* L. (rye) and *Triticum aestivum* L. (wheat). General. 1913-W.P.F. (O-907, 4305, 5086, 5854).

Puccinia graminis Pers. f. sp. **phlei-pratensis** (Erikss. & Henn.) Stakm. & Piem. *in* J. Agric. Res. 10:433. 1917.
On *Phleum pratense* L. (timothy). General. 1913-W.P.F.

Puccinia graminis Pers. f. sp. **secalis** Erikss. & Henn. *in* Z. Pflanzenkr. 4:71. 1894.
On *Hordeum vulgare* L. (barley). Kings Co. 1951-T.J. *et al.*

Puccinia grindeliae Pk. *in* Bot. Gaz. 4:127. 1879.
On *Solidago* sp. (goldenrod). Colchester Co. 8 Aug. 1929-L.E.W. (W-248 det. E.B. Mains).

Puccinia helianthi Schw. *in* Schr. Nat. Ges. Leipz. 1:73. 1822.
On *Helianthus annuus* L. (sunflower) and *H. tuberosus* L. (Jerusalem artichoke). Halifax and Kings Co. 9 Sept. 1929-J.F.H.

Puccinia hieracii (Röhl.) Mart. *in* Fl. Mosq., ed. 2:227. 1817.
On *Cichorium intybus* L. (chicory), *Hieracium* sp. (hawkweed), *H. canadense* Michx. (Canada hawkweed), *H. scabrum* Michx. (rough hawkweed), *Leontodon autumalis* L. (fall dandelion), *Taraxacum erythrospermum* Andrz. (red seeded dandelion), *T. kok-saghyz* Rodin (dandelion) and *T. officinale* Weber (common dandelion). General. 11 Aug. 1906-W.P.F. (O-1897, 4506) (DAOM 12734, 12866, 12871, 12895).

Puccinia hordei Otth *in* Mitt. Naturforsch. Ges. Bern 1870:114. 1871.
On *Hordeum vulgare* L. (barley). General. 8 Oct. 1942-J.F.H.

Puccinia iridis (DC.) Wallr. *in* Rabenhorst, Dtsch. Kryptogamenfl. 1:23. 1844.
On *Iris versicolor* L. (blue flag). General. 31 Aug. 1931-L.E.W. (W-1199, 1441) (O-4930, 4938).

Puccinia karelica Tranz. *in* Trav. Mus. Bot. Acad. Sci. St. Petersb. 2:16. 1905, subsp. **laurentina** Savile *in* Can. J. Bot. 43:236. 1965.
On *Carex paupercula* Michx. (sedge grass) and *Trientalis borealis* Raf. (star-flower). Colchester, Kings and Pictou Co. 1913-W.P.F. (DAOM 12889, 12890, 12891).

Puccinia limosae Magn. *in* Tagebl. Nat. Vers. Munchen 50:199. 1877.
On *Lysimachia ciliata* L. (fringed loosestrife). Colchester Co. 12 June 1940-A.E.R.

Puccinia linkii Klotzsch *in* Linnaea 8:490. 1833.
On *Viburnum trilobum* Marsh. (highbush cranberry). Kings Co. 19 May 1943-R.M.L., det. I.L.C.

Puccinia malvacearum Bert. ex Mont. *in* Gay, Hist. Fis. Polit. Chile Bot. 8:43. 1852.
On *Althaea rosea* (L.) Cav. (hollyhock), *Malva neglecta* Wallr. (dwarf mallow) and *M. rotundifolia* L. (round-leaved mallow). General. 18 June 1925-J.F.H. (O-4945).

Puccinia mariae-wilsoniae Clint. *in* Peck, Bull. Buffalo Soc. Nat. Sci. 1:66. 1873.
On *Claytonia caroliniana* Michx. (spring beauty) and *C. virginica* L. (spring beauty). 1913-W.P.F. (1941-A.E.R. det. L.E.W.).

Puccinia marylandica Lindr. *in* Medd. Stockh. Högsk. Bot. Inst. 4(9):2. 1901.
On *Sanicula* sp. (sanicle or black snakeroot). 1934-J.C.A.

Puccinia mcclatchieana Diet. & Holw. *in* Dietel, Erythea 2:127. 1894.
On *Scirpus rubrotinctus* Fern. (bulrush). 1934-J.C.A.

Puccinia menthae Pers. var. **menthae** *in* Syn. Fung.:220. 1801, 1959.
On *Lycopus* sp. (water-horehound), *Mentha arvensis* L. (wild-mint), *M. arvensis* L. var. *villosa* (Benth.) Stewart (field-mint), *M. piperita* L. (peppermint) and *M. spicata* L. (spearmint). General. 1913-W.P.F. (O-5116).

Puccinia mesomajalis Berk. & Curt. *in* Peck, Annu. Rep. N.Y. State Mus. 25:111. 1873.
On *Clintonia borealis* (Ait.) Raf. (poisonberry). Colchester, Kings and Pictou Co. 1913-W.P.F. (L.E.W.-1526 det. E.B. Mains).

Puccinia millefolii Fckl. *in* Jahrb. Nass. Ver. Nat. 23-24:55. 1870.
On *Achillea millefolium* L. (yarrow). Kings Co. 20 Aug. 1940-J.F.H.

★**Puccinia mixta** Fckl. *in* Symb. Mycol. 58. 1870.
On *Allium schoenoprasum* L. (chive). Lunenburg Co. 27 June 1978-C.O.G. (DAOM 167558, coll. R.W.D.).

Puccinia obscura Schroet. ex Pers. *in* Passerini Nuovo G. Bot. Ital. 9:256. 1877.
On *Luzula acuminata* Raf. (wood-rush) and *L. multiflora* (Retz.) Lejeune (common wood-rush). Colchester and Pictou Co. 1913-W.P.F.

Puccinia oenotherae Vize *in* Grevillea 5:109. 1877.
On *Oenothera* sp. (evening primrose). Kings Co. 10 June 1930-J.F.H. (Indistinguishable from *Uromyces plumbarius* Pk., fide J.A.P.).

Puccinia onopordi Syd. *in* Monogr. Ured. 1:128. 1902.
On *Onopordum acanthium* L. (scotch thistle). Pictou Co. 1913-W.P.F.

Puccinia orbicula Pk. & Clint. *in* Peck, Annu. Rep. N.Y. State Mus. 30:53. 1878.
On *Prenanthes altissima* L. (bird-bell), *P. racemosa* Michx. (rattlesnake-root) and *P. trifoliolata* (Cass.) Fern. (lion's paw). General. 16 June 1909-W.P.F. (O-4953, A.E.R.) (DAOM 12949).

Puccinia ornata Arth. & Holw. *in* Arthur, Bull. Geol. Nat. Hist. Surv. Minn.:3:30. 1887.
On *Rumex orbiculatus* Gray (water-dock). Colchester Co. 31 Aug. 1931-L.E.W. (W-1438).

★**Puccinia pelargonii-zonalis** Doidge *in* Bothalia 2:98.1926.
On *Pelargonium* sp. (geranium). Kings Co. 17 April 1973-C.O.G.

Puccinia pimpinellae (Strauss) Röhl. *in* Dtsch. Flora, ed. 2, 3(3):131. 1813.
On *Osmorhiza claytoni* (Mich.) Clarke (hairy sweet cicely). 1950-L.E.W. (O-4947, 5222 det. I.L.C.).

Puccinia poae-nemoralis Otth *in* Mitt. Naturforsch. Ges. 1870:113. 1871.
Puccinia poae-sudeticae (Westend.) Jorst.
On *Anthoxanthum odoratum* L. (sweet vernal grass). 1950-L.E.W. (A.E.R. 46 fide J.R.H.).

Puccinia poarum Niels. *in* Bot. Tidsskr. Ser. 3, 2:34. 1877.
Tussilago farfara L. (coltsfoot). 1934-J.C.A. (O-4931, 5155, 5164).

Puccinia polygoni-amphibii Pers. *in* Syn. Fung.:227. 1801.
On *Polygonum amphibium* L. var. *stipulaceum* (Coleman) Fern. and *P. convolvulus* L. (wild buckwheat). Kings, Lunenburg and Pictou Co. 1913-W.P.F. (O-4951).

Puccinia porphyrogenita Curt. *in* Thümen, Mycoth. Univ. 545. 1876.
On *Cornus canadensis* L. (bunchberry). Colchester, Kings and Pictou Co. 1913-W.P.F.

Puccinia praegracilis Arth. *in* Bull. Torrey Bot. Club 34:585. 1907, var. **cabotiana** Savile *in* Can. J. Bot. 35:199. 1957.

On *Habenaria psychodes* (L.) Spreng. (purple fringed orchid) and on leaves of *Hierochloe odorata* (L.) Beauv. (sweet-grass). Victoria Co. 24 June 1947-D.B.O.S. (Savile 3291 *in* DAOM).

Puccinia praegracilis Arth. var. **connersii** (Savile) Savile *in* Mycologia 43:458. 1951.

On *Habenaria lacera* (Michx.) Lodd. (ragged fringed orchid). Inverness Co. 29 June 1950-D.B.O.S. (coll. F. Roll-Hansen).

Puccinia punctata Link *in* Mag. Ges. Naturforsch. Freunde Berl. 7:30. 1815.

On *Galium asprellum* Michx. (rough bedstraw) and *G. triflorum* Michx. (sweet-scented bedstraw). Colchester and Pictou Co. 1913-W.P.F.

Puccinia punctiformis (Strauss) Röhl. *in* Dtsch. Fl., ed. 2, 3(3):132. 1813.

On *Cirsium arvense* (L.) Scop. (Canada thistle) and *C. vulgare* (Savi) Tenore (bull thistle). General. 1913-W.P.F. (O-1212, 5121).

Puccinia recondita Rob. ex Desm. *in* Bull. Soc. Bot. Fr. 4:798. 1857.

On *Agropyron repens* (L.) Beauv. (couchgrass), *Agrostis* alba L. (red top), *A. perennans* (Walt.) Tuckerm. (bent-grass), *A. tenuis* Sibth. (brown top), *Alopecurus pratensis* L. (meadow foxtail), *Bromus ciliatus* L. (fringed brome-grass), *Clematis virginiana* L. (virgin's-bower), *Hordeum jubatum* L. (foxtail barley), *Impatiens capensis* Meerb. (touch-me-not), *Puccinellia americana* Sorensen (salt-marsh grass), *Ranunculus acris* L. (tall buttercup), *R. cymbalaria* Pursh (seashore buttercup), *Secale cereale* L. (rye), *Thalictrum polygamum* Muhl. (meadow-rue) and *Triticum aestivum* L. (wheat). General. 1913-W.P.F.

Puccinia rubefaciens Johans. *in* Bot. Not. 1886:174. 1886.

On *Galium boreale* L. var. *intermedium* DC. Kings Co. 1934-I.L.C.

Puccinia sessilis Schneid. ex Schroet. *in* Schroeter, Abh. Schles. Ges. 48:19. 1870.

On *Convallaria majalis* L. (lily-of-the-valley), *Iris versicolor* L. (blue flag), *Maianthemum canadense* Desf. (wild lily-of-the-valley), *Phalaris arundinacea* L. (reed canary-grass), *Polygonatum pubescens* (Willd.) Pursh (solomon's seal), *Smilacina racemosa* (L.) Desf. (false solomon's seal) and *Streptopus roseus* Michx. var. *perspectus* Fassett. Colchester, Kings and Pictou Co. 1913-A.H.M.

Puccinia seymouriana Arth. *in* Bot. Gaz. 34:11. 1902.

On *Apocynum androsaemifolium* L. (spreading dogbane), *Spartina patens* (Ait.) Muhl. (highwater grass) and *S. pectinata* Lk. (broad-leaf cordgrass). Annapolis and Antigonish Co. 10 July 1938-J.F.H.

Puccinia sorghi Schw. *in* Trans. Am. Philos. Soc. (2) 4:295. 1832.

On *Zea mays* L. (field corn) and *Z. mays* L. var. *rugosa* Bonsf. (sweet corn).

Puccinia sparganioides Ell. & Barth. *in* Erythea 4:2. 1896.

On *Fraxinus americana* L. (white ash), *F. nigra* Marsh. (black ash), *Spartina patens* (Ait.) Muhl. (highwater grass) and *S. pectinata* Lk. (broad-leaf cordgrass). Kings Co. 1 July 1932-K.A.H.

Puccinia variabilis Grev. *in* Scott. Crypt. Flora 2:75. 1824.

On *Taraxacum officinale* Weber (common dandelion). Kings, Pictou and Queens Co. 26 Aug. 1908-W.P.F. (DAOM 13026-13029).

Puccinia violae (Schum.) DC. *in* Flore Fr. 6:62. 1815, ssp. **americana** Savile *in* Fungi Canadenses No. 75. 1975.

On *Viola cucullata* Ait. (blue violet), *V. fimbriatula* J.E. Sm. (northern downy violet), *V. pallens* (Banks) Brainerd (small white violet) and *V. septentrionalis* Greene (northern blue violet). General. 28 May 1925-J.F.H. (DAOM 1214, 75333, 75334, 78890).

Puccinia virgae-aureae (DC.) Lib. *in* Crypt. Pl. Ardvenna 4:393. 1837.

On *Solidago puberula* Nutt. (rough goldenrod) and *S. rugosa* Mill. (rough goldenrod). 1934-J.C.A.

Pucciniastrum agrimoniae (Diet.) Tranz. *in* Scr. Bot. Hortic. Univ. Petrop. 4:301. 1895.
On *Agrimonia gryposepala* Wallr. (agrimony). General. 1912-W.P.F. (L.E.W. 264).

Pucciniastrum americanum (Farl.) Arth. *in* Bull. Torrey Bot. Club 47:468. 1920.
On *Picea glauca* (Moench) Voss (white spruce), *P. pungens* Engelm. (Colorado blue spruce), *Rubus idaeus* L. (red raspberry) and *R. idaeus* var. *strigosus* (Michx.) Maxim. (wild raspberry). General. 1913-W.P.F. (O-2074, 3714, 4996).

Pucciniastrum arcticum (Lagerh.) Tranz. *in* Scr. Bot. Hortic. Univ. Petrop. 4:300. 1895.
On *Rubus pubescens* Raf. (dewberry). Colchester and Kings Co. 1913-W.P.F. (O-4991, I.L.C.).

Pucciniastrum epilobii Otth *in* Mitt. Naturforsch. Ges. Bern. 1861:72. 1861.
Pucciniastrum pustulatum (Pers.) Diet.
On *Abies balsamea* (L.) Mill. (balsam fir), *Clarkia* sp. (evening primrose family), *Epilobium adenocaulon* Haussk. (willow-herb), *E. angustifolium* L. (fireweed), *E. glandulosum* Lehm. and *E. hornemanni* Reichenb. General. 1913-W.P.F. (O-4481, 4520).

Pucciniastrum geoppertianum (Kühner) Kleb. *in* Wirtsw. Rostp.:391. 1904.
Calyptospora goeppertiana Kühner.
On *Abies balsamea* (L.) Mill. (balsam fir), *Vaccinium angustifolium* Ait. (lowbush blueberry), *V. corymbosum* L. (highbush blueberry), *V. myrtilloides* Michx. (Canada blueberry) and *V. vitis-idaea* L. var. *minus* Lodd. (foxberry). General. 1922-W.P.F. (O-5861).

Pucciniastrum potentillae Kom. *in* Jaczewski, Komarov & Tranzschel, Fungi Rossiae 327. 1900.
On *Potentilla tridentata* Ait. (three-toothed cinquefoil). Guysborough and Inverness Co. Aug. 1956-D.B.O.S.

Pucciniastrum pyrolae Diet. ex Arth. *in* North Am. Flora 7:108. 1907.
On *Pyrola elliptica* Nutt. (shin-leaf) and *P. rotundifolia* L. var. *americana* (Sweet) Fern. (wintergreen). Colchester and Pictou Co. 1913-W.P.F. (L.E.W.-138, 452).

Pucciniastrum vaccinii (Wint.) Jorst. *in* Skr. Norske Vidensk.-Akad. Oslo 1: 1951(2):55. 1952.
On *Rhododendron canadensis* (L.) Torr. (rhodora), *Tsuga canadensis* (L.) Carr. (hemlock), *Vaccinium angustifolium* Ait. (lowbush blueberry), and *V. vitis-idaea* L. var. *minus* Lodd. (foxberry). General. 1913-W.P.F. (O-1737, 3062).

Pulveroboletus ravenelii (Berk. & Curt.) Murr. *in* Mycologia 1:9. 1909.
Boletus ravenelii Berk. & Curt.
Suillus ravenelii (Berk. & Curt.) Kuntze.
Under *Picea* sp. (spruce), *Quercus* sp. (oak) and *Tsuga* sp. (hemlock). Cape Breton Island and Kings Co. 1912-Thomas Langton (KM-1400, 1455 *in* DAOM, K.A.H.) (ACAD 10374, D.W.G., K.A.H.).

Pustulina catinus (Holmsk. ex Fr.) Eckbl. *in* Nytt Mag. Bot. 15, 1-2:84. 1968.
Geopyxis catinus (Holmsk. ex Fr.) Sacc.
Peziza catinus Homlsk. ex Fr.
Pustularia catinus (Holmsk. ex Fr.) Fckl.
On soil under *Picea* sp. (spruce). Colchester Co. 20 Aug. 1931-L.E.W. (W-1373, leg. A.H.S.).

Pustulina cupularis (L. ex Fr.) Eckbl. *in* Nytt Mag. Bot. 15, 1-2:85. 1968.
Geopyxis cupularis (L. ex Fr.) Sacc.
Peziza cupularis L. ex Fr.
Pustularia cupularis (L. ex Fr.) Fckl.

On burnt soil, forest mold, fir twigs, etc. Annapolis and Kings Co. 1913-A.H.M. (KM-1103, 1149, 1150 *in* DAOM, K.A.H.).

Pycnoporellus fulgens (Fr.) Donk *in* Persoonia 6(2):216. 1971.
Polyporus fibrillosus Karst.
Pycnoporellus fibrillosus (Karst.) Murr.
On *Abies balsamea* (L.) Mill. (balsam fir) and *Picea* sp. (spruce). Colchester and Kings Co. 10 Aug. 1931-L.E.W. (W-1249 det. J.L.L.) (KM-100, 4315, 4357 *in* DAOM, K.A.H.) (O-F5497).

Pyconporus cinnabarinus (Jacq. ex Fr.) Karst. *in* Rev. Mycol. 3, 9:18. 1881.
Polyporus cinnabarinus (Jacq.) Fr.
On *Acer rubrum* L. (red maple), *Betula lutea* Michx. f. (yellow birch), *Fagus grandifolia* Ehrh. (beech), *Picea glauca* (Moench). Voss (white spruce). *Pinus strobus* L. (white pine) and *Populus tremuloides* Michx. (trembling aspen). Colchester and Kings Co. 1881-J.S. (A.H.M.) (KM-71, 771, 3112, 4229 *in* DAOM, K.A.H.) (L.E.W.-87) (A.R.P.-6073, 6161) (O-F2896, 2897).

★**Pyrenochaeta rhenana** Sacc. *in* Syll. Fung. 3:220. 1884.
On wood of *Ulmus americana* L. (American elm) infected with *Ceratocystis ulmi* (Buism.) Moreau. Kings Co. 3 Dec. 1970-C.O.G.).

★**Pyrenochaeta terrestris** (Hansen) Gorenz, J.C. Walker & Larson *in* Phytopathology 38:838. 1948.
From roots and crowns of *Fragaria* sp. (cultivated strawberry). Kings Co. 10 Sept. 1964-C.O.G.

Pyrenopeziza artemisiae (Lasch) Rehm var. **artemisiae** *in* Ascomyceten:66. 1872.
On *Solidago* sp. (goldenrod). Colchester Co. 19 June 1933-L.E.W. (W-1518).

Pyrenopeziza artemisiae (Lasch) Rehm var. **solidaginis** Rehm *in* Ascomyceten:1957. 1872.
On stems of *Solidago* sp. (goldenrod). Colchester Co. 1 Aug. 1929-L.E.W. (W-195, 1517).

Pyrenopeziza rubi (Fr.) Rehm *in* Ascomyceten:416. 1878.
On stems of *Rubus* sp. (raspberry or blackberry). Colchester Co. 24 June 1929-L.E.W. (W-5).

Pyrenophora chaetomioides Speg. *in* An. Mus. Nac. B. Aires 6:285. 1899.
Stat. conid. *Drechslera avenacea* (Curt. & Cke.) Schoem.
Helminthosporium avenaceum Curt. & Cke.
On *Avena sativa* L. (oat). General. 10 Aug. 1939-K.A.H. (O-4973 to 4975, 4926, 4977, 5110, 5115).

Pyrenophora graminea Ito & Kurib. *in* Proc. Imp. Acad. Tokyo 6:353. 1930.
Stat. conid. *Drechsler graminea* (Rabenh. ex Schlecht.) Shoem.
Helminthosporium gramineum Rabenh. ex Schlecht.
On *Hordeum vulgare* L. (barley). General. 1921-J.B.M. (Can. Plant Dis. Surv. 2:14. 1921).

Pyrenophora teres Drechsler *in* J. Agric. Res. 24:656. 1923.
Stat. conid. *Drechslera teres* (Sacc.) Shoem.
Helminthosporium teres Sacc.
On *Hordeum* sp. (barley). General. 1931-I.L.C. (O-4510, 4987, 5026, 5111).

Pyrenophora trichostoma (Fr.) Fckl. *in* Symb. Mycol.:215. 1870.
On *Agropyron repens* (L.) Beauv. (couchgrass) and *Secale cereale* L. (rye) Kings Co. 26 May 1925-J.F.H.

Pyronema omphalodes (Bull. ex St. Amans) Fckl. *in* Symb. Mycol.:319. 1870.
From Kings Co. 25 Aug. 1946-K.A.H. (KM-1648 *in* DAOM).

Pythium debaryanum Hesse *in* Inaugural Dissertation, Halle:14-34. 1874.
On *Beta vulgaris* L. (beet and mangel) and *Solanum tuberosum* L. (potato). Kings Co. 18 June 1934-J.F.H.

★**Pythium irregulare** Buism. *in* Meded. Phytopathol. Lab. Willie Commelin Scholten 11:38. 1927.
From roots of *Fragaria* sp. (cultivated strawberry). Annapolis Co. 19 Jan. 1973-C.O.G.

★**Pythium oligandrum** Drechsler *in* J. Wash. Acad. Sci. 20:409-410. 1930.
On stems of *Satureja hortensis* L. (summer savory). Tancook Island, Lunenburg Co. 22 Aug. 1977-C.O.G. (DAOM 166163).

★**Pythium splendens** Braun *in* J. Agric. Res. 30:1061. 1925.
Causing black stem rot of *Pelargonium* sp. (geranium). Kings Co. March 1964-C.O.G.

★**Pythium ultimum** Trow *in* Ann. Bot. 15:300-301. 1901.
From roots of *Fragaria* sp. (cultivated strawberry). Pictou Co. 26 May 1971-C.O.G.

Radulum casearium (Morg.) Lloyd *in* Mycol. Writ. 5 (Genus *Radulum*):8. 1917.
On *Populus tremuloides* Michx. (trembling aspen). 1975-L.P.M., J.M.M.

Radulum orbiculare Fr. *in* Elench. Fung. 1:149. 1828.
On *Abies balsamea* (L.) Mill. (balsam fir), *Acer saccharum* Marsh. (sugar maple), *A. spicatum* Lam. (mountain maple), *Alnus* sp. (alder), *Betula alba* L. (white birch), *Fagus grandifolia* Ehrh. (beech), *Pinus* sp. (pine), *Populus* sp. (poplar) and *Tsuga canadensis* (L.) Carr. (hemlock). Annapolis and Colchester Co. 13 July 1931-L.E.W. (W-1495 det. K.C., 1723) (O-F2990, 5209, 5486) (KM-4261 *in* DAOM, K.A.H.).

Radulum quercinum (Fr.) Fr. *in* Hymen. Eur.:623. 1874.
On *Malus pumila* Mill. (apple). Kings Co. 1950-L.E.W. (O-F6136).

Ramaria apiculata (Fr.) Donk var. **apiculata** *in* Rev. Niederl. Homobas., Aphyll. 2:105. 1933.
From Kings Co. 27 Aug. 1977-B.J.M., (B.J.M.-82 *in* ACAD).

Ramaria apiculata (Fr.) Donk var. **compacta** Bourd. et Galz. *in* Hymén. Fr.:98. 1928.
Clavaria acris Pk.
On conifer logs. Colchester and Halifax Co. 30 June 1931-L.E.W. (W-1133a, 1179, 1179a).

Ramaria aurea (Fr.) Quél. *in* Flore Mycol.:467. 1888.
Clavaria flava sensu Fr.
On soil in woods. Halifax, Kings, Pictou and Queens Co. 1908-A.H.M. (KM-606, 5045, 5082 *in* DAOM, K.A.H.) (ACAD 5082 coll. K.A.H.) (B.J.M.-99, 109, 110 *in* ACAD).

Ramaria botrytis (Fr.) Ricken var. **botrytis** *in* Vademecum:253. 1918.
Clavaria botrytis Pers.
In groves of *Picea* sp. (spruce) and in frondose woods. Kings Co. and others. 1880-J.S. (B.J.M.-42, 57, 121, 122, 146 *in* ACAD) (KM-5036, 5044, 5056, 5097 *in* DAOM, K.A.H. det. R.H.P.).

Ramaria botrytis (Fr.) Ricken var. **holorubella** (Atk.) Corner *in* Nova Hedwigia 33:265. 1970.
Ramaria holorubella (Atk.) Corner.
Ramaria rufescens (Fr.) Corner.
Ramaria secunda (Berk.) Corner.
On soil in woods. Colchester, Kings and Queens Co. 22 July 1931-L.E.W. (W-1116, 1116a, 1371a,b) (KM-638, 639 and 5093, 5096, 5098, 5449 det. R.H.P. *in* DAOM, K.A.H.) (ACAD 5451, 5822, coll. K.A.H. det. R.H.P. & P.O. as *R. secunda* (B.J.M.-26, 50 *in* ACAD).

Ramaria botrytoides (Pk.) Corner *in* Monogr of *Clavaria* and Allied Genera:562. 1950.
From Kings Co. 23 Sept. 1977-B.J.M. (B.J.M.-105, 142 *in* ACAD).

Ramaria conjunctipes (Coker) Corner *in* Monogr. of *Clavaria* and Allied Genera: 567. 1950.
From Kings Co. 15 Aug. 1977-B.J.M. (B.J.M.-28, 78, 144 *in* ACAD).

Ramaria flaccida (Fr.) Ricken *in* Vademecum:254. 1918.
Clavaria flaccida Fr.
On soil in coniferous, mixed and hardwood stands. Colchester Co. 1 Aug. 1931-L.E.W. (W-1196 coll. A.H.S., 1196a-c).

Ramaria flava (Fr.) Quél. *in* Flore Mycol.:466. 1888.
Clavaria flava Schaeff.
On soil in woods. Antigonish, Colchester and Kings Co. 29 Aug. 1931-L.E.W. (W-1429, 1429a coll. A.H.S.) (KM-616, 5094 *in* DAOM, K.A.H.).

Ramaria flavigelatinosa Marr. & Stuntz *in* Bibl. Mycol. 38:81. 1973.
From Kings Co. 31 Aug. 1977-B.J.M. (B.J.M.-92 *in* ACAD).

Ramaria flavobrunnescens (Atk.) Corner var. **flavobrunnescens** *in* Monogr. of *Clavaria* and Allied Genera:581. 1950.
From Kings and Queens Co. July 1930-K.A.H. (ACAD 607 coll. K.A.H. 5045 coll. R.H.P.) (B.J.M.-53, 59, 79 and others *in* ACAD) (KM-5444 *in* DAOM, det. P.O.).

Ramaria flavobrunnescens (Atk.) Corner var. **aurea** Coker in Clavaria of U.S.A. and Can.:124. 1923.
Clavaria flava Schaeff. var. *aurea* Coker.
On damp soil under conifers. Colchester and Kings Co. 29 Aug. 1931-L.E.W. (W-1428) (B.J.M.-97 *in* ACAD).

Ramaria flavobrunnescens (Atk.) Corner var. **formosoides** Corner *in* Nova Hedwigia 33:274. 1970.
From Annapolis and Kings Co. 19 Sept. 1959-K.A.H. (ACAD 5038 coll. K.A.H. det. R.H.P.) (B.J.M.-34, 88 *in* ACAD) (KM-5038 *in* DAOM det. R.H.P.).

Ramaria formosa (Pers. ex Fr.) Quél. *in* Flore Mycol.:466. 1888.
Clavaria formosa Pers. ex Fr.
On soil in woods (chiefly frondose). Annapolis and Kings Co. 4 Sept. 1932-K.A.H. (KM-617, 618, 942, 947, 4986 *in* DAOM) (B.J.M.-33, 40, 47 *in* ACAD).

Ramaria gracilis (Fr.) Quél. *in* Flore Mycol.:463. 1888.
Clavaria gracilis (Fr.) Karst.
On hardwood leaves, on mossy soil, and under conifers. Colchester, Hants and Kings Co. 1 Sept. 1928-L.E.W. (W-60, 1372 coll. A.H.S., 1372a) (B.J.M.-.41 *in* ACAD).

Ramaria guyanensis (Pat.) Corner *in* Monogr. of *Clavaria* and Allied Genera:596. 1950.
Clavaria longicaulis Pk.
Ramaria longicaulis (Pk.) Corner.
In humus in fondose woods. Kings Co. 4 Sept. 1938-K.A.H. (KM-940 *in* DAOM).

Ramaria holorubella (Atk.) Corner *in* Ann. Bot. Mem. 1:596. 1950.
See *Ramaria botrytis* (Fr.) Ricken var. *holorubella* (Atk.) Corner.

Ramaria obtusissima (Pk.) Corner *in* Monogr. of *Clavaria* and Allied Genera:609. 1950.
Clavaria obtusissima Pk.
On soil under conifers and hardwoods. Annapolis, Colchester and Kings Co. 27 Aug. 1931-L.E.W. (W-1412, 1414, 1415, coll. A.H.S.) (KM-630, 631, 5084 *in* DAOM, K.A.H.) (B.J.M.-38, 98, 103 *in* ACAD).

Ramaria ochraceo-virens (Jungh.) Donk. *in* Rev. Niederl. Homobas., Aphyll. 2:112. 1933.
Clavaria abientina Pers.
Under *Abies* sp. (fir) and *Picea* sp. (spruce). Cape Breton, Colchester, Halifax, Kings and Victoria Co. 1908-A.H.M. (L.E.W.-1326 coll. A.H.S.) (KM-647, 658, 5043, 5447 det. P.O. 5448 *in* DAOM, K.A.H.).

Ramaria rubripermanens Marr. & Stuntz *in* Bibl. Mycol. 38:43. 1973.
From Kings Co. 14 Aug. 1977-B.J.M. (B.J.M.-14, 106, 116, 138 *in* ACAD).

★**Ramaria sanguinea** (Coker) Corner *in* Ann. Bot. Mem. 1:620. 1950.
From Cape Breton and Kings Co. 21 Sept. 1952-K.A.H. (KM-5037, 5047, 5100 *in* DAOM, det. R.H.P.).

Ramaria stricta (Fr.) Quél. *in* Flore Mycol.:464. 1888, var. **concolor** Corner *in* Monogr. of *Clavaria* and Allied Genera:623. 1950.
Clavaria stricta sensu Coker.
On decaying hardwood logs and old wood. Annapolis, Colchester, Guysborough, Hants, Kings, Lunenburg and Pictou Co. 1908-A.H.M. (L.E.W.-1133, 1133b,c) (KM-641, 945, 4167, 4168, 5050, 5090, 5095 *in* DAOM, K.A.H.) (B.J.M.-4, 30, 37 and others *in* ACAD).

Ramaria subbotrytis (Coker) Corner var. **subbotrytis** *in* Monogr. of *Clavaria* and Allied Genera:625. 1950.
From Kings Co. 16 Sept. 1977-B.J.M. (B.J.M.-133 *in* ACAD).

Ramaria subbotrytis (Coker) Corner var. **intermedia** Coker *in* Clavarias of U.S. and Can.:117. 1923.
From Kings Co. 25 Aug. 1977-B.J.M. (B.J.M.-682 coll. S.C. *in* ACAD).

Ramaria suecica (Fr.) Donk *in* Rev. Niederl. Homobas., Aphyll. 2:105. 1933.
Clavaria suecica Fr.
On leaf mold under conifers or hardwoods. Colchester, Hants and Kings Co. 31 Aug. 1927-L.E.W. (W-54, 1362, 1362a,b) (B.J.M.-31, 108 *in* ACAD).

Ramaria testaceo-flava (Bres.) Corner *in* Ann. Bot. Mem. 1:630. 1950.
Clavaria testaceo-flava Bres.
On humus in coniferous or mixed woods. Kings Co. 30 Aug. 1973-R.H.P. (TENN 38044) (TENN 38089 coll. K.A.H., 1 Sept. 1973).

Ramaria testaceo-viridis (Doty) Corner *in* Monogr. of *Clavaria* and Allied Genera: 631. 1950.
From Kings Co. 4 Sept. 1932-K.A.H. (KM-645 *in* DAOM) (ACAD 645 coll. K.A.H. det. R.H.P.).

Ramaria xanthosperma (Pk.) Corner *in* Monogr. of *Clavaria* and Allied Genera: 632. 1950.
Clavaria xanthosperma Pk.
On soil in mixed woods. Colchester and Kings Co. 22 July 1931-L.E.W. (W-1117) (KM-644 *in* DAOM, K.A.H.((ACAD 644 coll. K.A.H. det. R.H.P.).

Ramariopsis biformis (Atk.) Petersen *in* Bull. Torrey Bot. Club 91:276. 1964.
Clavaria biformis Atk.
Clavulinopsis biformis (Atk.) Corner.
From Annapolis Co. 14 Sept. 1963-K.A.H. (KM-5033 *in* DAOM, det. R.H.P.).

Ramariopsis crocea (Fr.) Corner *in* Monogr. of Clavaria and Allied Genera: 638. 1950.
Clavaria crocea Pers.
On leaf mold. Annapolis, Colchester and Kings Co. 18 Aug. 1931-L.E.W. (W-1361 coll. A.H.S.) (B.J.M.-140, 149 *in* ACAD) (KM-5026 *in* DAOM, K.A.H., det. P.O.).

Ramariopsis kunzei (Fr.) Donk *in* Rev. Niederl. Homobas., Aphyll. 2:89. 1933.
Clavaria kunzei Fr.
Clavaria subcaespitosa Pk.
On soil and decayed wood. Annapolis, Colchester, Cumberland and Kings Co. 10 Aug. 1931-L.E.W. (W-1250 coll. A.H.S., 1250a) (B.J.M.-72, 117, 119 *in* ACAD) (KM-624, 4988, 4993, 4998, 5000, 5039, 5075, 5091, 5092 det. R.H.P., 5443 det. P.O. *in* DAOM, K.A.H.).

Ramariopsis rufipes (Atk.) Petersen *in* Bull. Torrey Bot. Club 91:274. 1964.
Clavaria rufipes Atk.
Clavulinopsis rufipes (Atk.) Corner.
On decayed leaves, humus and twigs. Colchester Co. 15 Aug. 1931-L.E.W. (W-1314).

Ramularia alnicola Cke. *in* Grevillea 14:40. 1885.
On leaves of *Alnus crispa* (Ait.) Pursh var. *mollis* Fern. (downy alder). Digby Co. 12 Sept. 1952-D.W.C., A.E.R., D.B.O.S.

★**Ramularia arvensis** Sacc. *in* Michelia 2:548. 1882.
On leaves of *Potentilla simplex* Michx. (five-finger or cinquefoil). Kings Co. 3 Sept. 1952-D.W.C., D.B.O.S.

Ramularia brunnea Pk. *in* Annu. Rep. N.Y. State Mus. 30:55. 1878.
See stat. perf. *Mycosphaerella tussilaginis* (Rehm) Lindau.

★**Ramularia cilinodis** Davis *in* Notes of Parasitic Fungi in Wisconsin 8:415. 1920.
On leaves of *Polygonum cilinode* Michx. (knotweed). Kings Co. 23 June 1949-J.F.H.

Ramularia destructiva Phill. & Plowr. *in* Grevillea 1:94. 1872.
Ovularia destructiva (Phill. & Plowr.) Massee.
On *Myrica gale* L. (sweet gale). Queens Co. 20 July 1939-J.F.H. (O-5859 det. I.L.C.).

★**Ramularia destruens** Pk. *in* Annu. Rep. N.Y. State Mus. 44:26. 1891.
On leaves of *Sorbus americana* Marsh. (American mountain ash). Shelburne Co. 7 Aug. 1953-D.W.C.

★**Ramularia didyma** Ung. *in* Exanth. Pfl.:169. 1833.
Didymaria didyma (Ung.) Pound.
On leaves of *Ranunculus repens* L. (creeping buttercup). Kings Co. 25 Sept. 1962-C.O.G.

Ramularia effusa Pk. *in* Annu. Rep. N.Y. State Mus. 32:42. 1879.
On leaves of *Gaylussacia baccata* (Wang.) K. Koch (huckleberry), and *Vaccinium angustifolium* Ait. (lowbush blueberry). Queens and Lunenburg Co. 1 Aug. 1953-D.W.C.

★**Ramularia filaris** Fres. *in* Beitr. Mycol. 3:90. 1863, var. **lappae** Bres. *in* Hedwigia 35:200. 1896.
On leaves of *Arctium minus* (Hill) Bernh. (common burdock). Kings Co. 17 Sept. 1951-D.W.C.

Ramularia lethalis Ell. & Ev. *in* Proc. Acad. Nat. Sci. Phila.:86. 1891.
On leaves of *Acer spicatum* Lam. (mountain maple). Kings Co. 20 June 1952-D.W.C., D.B.O.S.

Ramularia melampyri Ell. & Dearn. *in* New Spec. Can. Fungi in Can. Rec. Sci.:272. 1893.
On foliage of *Melampyrum lineare* Desr. (cow wheat). Kings Co. 27 July 1942-R.M.L.

Ramularia oxalidis Farl. *in* Appalachia 3:251. 1883.
On leaves of *Oxalis montana* Raf. (wood sorrel). Halifax, Inverness and Kings Co. 23 Oct. 1952-K.A.H., D.W.C. (Savile 3241, 3282 *in* DAOM).

★**Ramularia plantaginis** Pk. *in* Annu. Rep. N.Y. State Mus. 32:43. 1879.
On leaves of *Plantago lanceolata* L. (English plantain) and *P. major* L. (broad leaved plantain). Kings Co. 26 Sept. 1951-D.W.C.

Ramularia pusilla Ung. *in* Exanth. Pfl. 169. 1883.
Ovularia pusilla (Ung.) Sacc.
Ramularia pulchella Ces. apud Rab.
On *Anthoxanthum odoratum* L. (sweet vernal grass). Guysborough Co. Aug. 1956-D.B.O.S.

Ramularia rosea (Fckl.) Sacc. *in* Fung. Ital. Del., tab. 1001. 1881; Michelia 2:550. 1882.
On leaves of *Salix discolor* Muhl. (pussy willow). Kings Co. 4 Sept. 1952-D.W.C., D.B.O.S.

Ramularia rubella (Bon.) Nannf. *in* Lundell & Nannfeldt, Fung. Exs. Suec.:1992. 1950.
Ovularia monosporia (Westend) Pound & Clem.
Ramularia decipiens Ell. & Ev.
On leaves of *Rumex crispus* L. (curled dock) and *R. obtusifolius* L. (bitter dock). Kings and Victoria Co. 17 July 1951-D.W.C., G.L.M., J.A.P. (Savile 3289 *in* DAOM).

Ramularia subsanguinea (Ell. & Ev.) Savile *in* Can. J. Bot. 35:205. 1957.
Cercospora subsanguinea Ell. & Ev.
Ramularia rubicunda Bres.
On leaves of *Maianthemum canadense* Desf. (wild lily-of-the-valley) and *Mahonia aquifolium* Nutt. (*Berberis aquifolium* Pursh) (manhonia or barberry). Inverness and Queens Co. 1 Aug. 1953-D.W.C. (Savile 3283 *in* DAOM).

Ramularia taraxaci Karst. *in* Fragm. Mycol. 6:7. 1883.
On *Taraxacum officinale* Weber (dandelion). Kings Co. 1 Aug. 1926-K.A.H.

Ramularia vaccini Pk. *in* Annu. Rep. N.Y. State Mus.:35:141. 1884.
On *Vaccinium* sp. (blueberry, etc.) 1975-L.P.M., J.M.M.

Ramularia viburni Ell. & Ev. *in* J. Mycol.:69. 1889.
On leaves of *Viburnum alnifolium* Marsh. (hobblebush). Kings Co. 22 June 1928-K.A.H.

Rectipilus fasciculatus (Pers.) Agerer *in* Persoonia 7:419. 1973.
Henningsomyces incana Kuntze.
Solenia fasciculata Pers.
On old twigs and stems of *Betula* sp. Colchester Co. 3 Aug. 1929-L.E.W. (W-213, 1202, 1202a, fide M.A.D. as *S. faciculata*).

Rehmiellopsis balsameae Waterman *in* J. Agric. Res. 70:315-337. 1945.
On *Abies balsamea* (L.) Mill. (balsam fir). Cape Breton Island. 1924. (Can. Plant Dis. Surv. p. 98 as *R. bohemica* Bub. & Kab.)

Retinocyclus abietis (Crouan) Groves & Wells *in* Mycologia 48:869. 1956.
Tympanis abietis Crouan.
On *Abies balsamea* (L.) Mill. (balsam fir) and *Picea glauca* (Moench) Boss (white spruce). 1975-L.P.M., J.M.M.

Rhabdocline weirii Parker & Reid *in* Can. J. Bot. 47:1540. 1969, subsp. **oblonga** Parker & Reid *in* Can. J. Bot. 47:1543. 1969.
On *Pseudotsuga menziesii* (Mirb.) Franco (Douglas fir). Cumberland Co. 1975. (For. Insect and Dis. Surv.:29. 1975).

★**Rhabdospora inaequalis** Sacc. *in* Syll. Fung. 3:580. 1884.
On wood of *Sorbus americana* Marsh. (mountain ash). Cumberland Co. 6 June 1953-D.W.C.

Rhizina undulata (Fr.) Fr. *in* Syst. Mycol. 2:33. 1822.
Rhizina inflata (Schaeff.) Karst.
On mineral soil of burnt area in coniferous woods. Colchester Co. 9 Aug. 1945-K.A.H. (KM-1643, 5162 *in* DAOM) (DAOM 112926).

Rhizoctonia solani Kühn *in* Die Krankheitender Kulturgewächse. Berlin. 1858.
See stat. perf. *Thanatephorus cucumeris* (Frank) Donk.

Rhizopogon cokeri A.H. Smith *in* Mem. N.Y. Bot. Gard. 14(2):58. 1966.
Under *Pinus resinosa* Ait. (red pine). Kings Co. 30 July 1953-K.A.H. (KM-4682, 4683, 4702 *in* DAOM) (ACAD 4682, 4683, 11227-11229).

Rhizopogon evadens A.H. Smith *in* Mem. N.Y. Bot. Gard. 14:151. 1966.
Rhizopogon rubescens Tul.
In soil under *Picea* sp. (spruce), *Pinus* sp. (pine) and *Tsuga* sp. (hemlock). Kings and Richmond Co. 26 June 1932-K.A.H. (KM-1215, 4678-4681, 4694, 4698, 4699, 4705, 4707 *in* DAOM) (ACAD 1215 coll. K.A.H. det. A.H.S., 11231, 11232).

Rhizopogon truncatus Linder *in* Rhodora 29:196. 1924.
From Kings Co. 26 July 1953-K.A.H. (KM-4677 *in* DAOM) (ACAD 4677 det. A.H.S.).

Rhizopogon vulgaris (Vitt.) Lange *in* Dan. Bot. Ark. 16:56. 1956.
Under *Pinus resinosa* Ait. (red pine). Kings Co. 30 July 1953-K.A.H. (KM-4701 *in* DAOM, det. A.H.S.).

⋆**Rhizopus arrhizus** Fischer *in* Rabenhorst Kryptogamenfl., Pilze, 4:233. 1892.
On *Nicotiana tabacum* L. (tobacco) and from milled peat, *Spagnum* sp. Kings Co. 1961-C.O.G.

Rhizopus stolonifer (Ehr. ex Fr.) Vuill. *in* Rev. Mycol. 25:54. 1902.
Rhizopus nigricans Ehr.
The bread mold, causing rot of *Cucurbita maxima* Duchesne (winter squash), *Fragaria* sp. (cultivated strawberry), *Malus pumila* Mill. (apple), *Prunus* spp. (peach and plum), *Pyrus communis* L. (pear) and *Rubus idaeus* L. (red raspberry). General. 1913-A.H.M.

Rhizosphaera pini (Cda.) Maubl. *in* Bull. Soc. Mycol. Fr. 23:171. 1907.
Coniothyrium pini Cda.
Leptothyrium pini (Cda.) Sacc.
Rhizosphaera abietis Mang. & Har.
Needle blight on *Abies balsamea* (L.) Mill. (balsam fir). 1975-L.P.M., J.M.M.

Rhizothyrium abietis Naumov *in* Champ. Oural. 1:40. 1915.
On *Abies balsamea* (L.) Mill. (balsam fir). 1975-L.P.M., J.M.M.

Rhodocybe mundula (Lasch) Sing. *in* Lilloa 22:609. 1951.
Rhodocybe novaboracensis (Pk.) Sing.
Clitopilus novaboracensis Pk.
On deciduous debris. Colchester Co. 14 Aug. 1931-A.H.S., L.E.W. (W-756).

★**Rhynchosporium secalis** (Oud.) Davis *in* Trans. Wis. Acad. Sci. Arts Lett. 19:713. 1919.
On leaves of *Hordeum vulgare* L. (barley). Kings Co. 9 July 1969-C.O.G.

Rhytisma acerinum (Pers. ex St. Amans) Fr. *in* Syst. Mycol. 2:569. 1823.
Stat. conid. *Melasmia acerina* Lév. (1846).
On *Acer rubrum* L. (red maple), *A. saccharinum* L. (silver maple) and *A. saccharum* Marsh. (sugar maple). Cape Breton Island and Kings Co. 21 Aug. 1936-J.F.H. (O-5221).

Rhytisma ilicis-canadensis Schw. *in* Syn. Fung. Am. Bor.:2026. 1832.
On *Nemopanthus mucronata* (L.) Trel. (false holly). Colchester, Queens and Richmond Co. 28 July 1931-L.E.W. (W-1234, 1234a).

Rhytisma punctatum Pers. ex Fr. *in* Syst. Mycol. 2:569. 1823.
On *Acer pensylvanicum* L. (striped maple), *A. rubrum* L. (red maple), *A. saccharum* Marsh. (sugar maple) and *A. spicatum* Lam. (mountain maple). Colchester Co. 1950-L.E.W. (W-278).

Rhytisma salicinum (Pers.) Fr. ex Fr. *in* Syst. Mycol. 2:568. 1823.
On *Salix discolor* Muhl. (large pussy willow). Cumberland Co. 24 July 1936-J.F.H.

★**Rigidoporus nigrescens** (Bres.) Donk *in* Persoonia 4:341. 1966.
Poria nigrescens Bres.
On deciduous wood. Kings Co. 3 Nov. 1953-K.A.H. (KM-3115 *in* DAOM, det. R.M.L. as *P. nigrescens*) (ACAD 3115).

Rigidoporus ulmarius (Sow. ex Fr.) Imaz. *in* Bull. Gov. For. Exp. Stn. Meguro 57:119. 1952.
Fomes ulmarius (Sow. ex Fr.) Gill.
Polyporus ulmarius Sow. ex Fr.
From Pictou Co. 1908-A.H.M. (see Wehmeyer 1950).

Rogersella eburnea Hojortstam & Hogholen *in* Mycotaxon 10:265. 1980.
On rotten *Tsuga* sp. (hemlock). Kings Co. 1 Sept. 1934-K.A.H. (DAOM 5488, holotype).

Rosellinia conglobata (Fckl.) Sacc. *in* Syll. Fung. 1:274. 1882, var. **microtricha** (Felt.) Höhn. *in* Sitzungsber. Akad. Wiss. Math.-Naturwiss. Kl. 115:1198. 1906.
On *Fagus grandifolia* Ehrh. (beech). Victoria Co. 5 Aug. 1931-L.E.W. (W-1229).

Rozites caperata (Pers. ex Fr.) Karst. *in* Hattsvampar 1:290. 1879.
Pholiota caperata (Fr.) Gill.
Under *Acer* sp. (maple). Annapolis, Colchester, Guysborough, Halifax, Hants and Kings Co. 1913-A.H.M. (KM-428, 429, 4037, 4038 *in* DAOM, K.A.H.) (L.E.W.-655, 655a).

Russula abietina Pk. *in* Annu. Rep. N.Y. State Mus. 54:180. 1901.
Under conifers. Colchester Co. 4 July 1931-A.H.S., L.E.W. (W-572).

Russula adusta (Pers. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:350. 1838.
In woods of *Pinus* sp. (pine). Halifax, Kings and Lunenburg Co. 1881-J.S. (A.H.M.) (KM-847 *in* DAOM, K.A.H.).

Russula aeruginea Lindbl. apud Fr. *in* Monogr. Hymen. Suec. 2:198. 1863.
On bare soil. Colchester and Kings Co. 1930-A.H.S., L.E.W. (W-113, 741) (KM-5488 *in* DAOM, K.A.H.).

Russula albida Pk. *in* Bull. N.Y. State Mus. 2:10. 1887.
In mixed woods. Colchester Co. 22 July 1929-A.H.S., L.E.W. (W-118, 232, 587).

Russula albidula Pk. *in* Bull. Torrey Bot. Club 25:370. 1898.
From Kings Co. Aug. 1936-K.A.H. (KM-3820-3822 *in* DAOM).

Russula albonigra (Krombh.) Fr. *in* Monogr. Hymen. Suec. 2:324. 1863.
Russula sordida Pk.
Russula subsordida Pk.
Under conifers and *Tsuga* sp. (hemlock). Colchester, Kings and Richmond Co. 1 July 1931-A.H.S., L.E.W. (W-541, 663) (KM-491, 492, 849, 3835 *in* DAOM, K.A.H.).

Russula alutacea (Pers. ex Schw.) Fr. *in* Epicr. Syst. Mycol.:362. 1838.
Under conifers. Colchester, Halifax and Lunenburg Co. 1880-J.S. (A.H.M.) (L.E.W.-586, 586a).

Russula amygdaloides Kauff. *in* Agar. Mich. 1:162. 1918.
From Kings Co. 2 Aug. 1932-K.A.H. (KM-478 *in* DAOM).

Russula aurantiolutea Kauff. *in* Rep. Mich. Acad. Sci. 11:81. 1909.
From Kings Co. 2 Aug. 1932-K.A.H. (KM-479 *in* DAOM, fide A.H.S.).

Russula aurata (With.) Fr. *in* Epicr. Syst. Mycol.:361. 1836-1838.
On ground in woods. Victoria Co. 1912-Thomas Langton.

Russula basifurcata Pk. *in* Annu. Rep. N.Y. State Mus. 38:90. 1885.
On humus in mixed woods. Colchester Co. 10 July 1931-A.H.S., L.E.W. (W-601).

Russula borealis Kauff. *in* Rep. Mich. Acad. Sci. 11:69. 1909.
On humus under conifers. Colchester Co. 12 Aug. 1931-A.H.S., L.E.W. (W-740).

Russula brevipes Pk. var. **brevipes** *in* Annu. Rep. N.Y. State Mus. 43:20. 1890.
On humus in mixed woods. Colchester, Kings and Lunenburg Co. 1908-A.H.M. (KM-481, 983, 3824 *in* DAOM, K.A.H.) (L.E.W.-576). Previously misidentified as *Russula delica* Fr.

Russula brunneola Burl. *in* North Am. Flora 9:233. 1915.
Under *Picea* sp. (spruce). Colchester and Victoria Co. 14 July 1931-A.H.S., L.E.W. (W-624) (KM-5369 *in* DAOM, K.A.H.).

Russula caerulea (Pers.) Fr. *in* Epicr. Syst. Mycol.:353. 1838.
From Kings Co. 28 Aug. 1933-K.A.H. (KM-480 *in* DAOM).

Russula claroflava Grove *in* Midl. Nat. 11:265. 1888.
Russula constans (Karst.) Romell.
Russula flava Romell apud Lonnegren.
Under mixed woods. Colchester and Kings Co. 11 July 1931-A.H.S., L.E.W. (W-608, 608a) (KM-483, 484, 485 *in* DAOM, K.A.H.).

★**Russula compacta** Frost & Pk. *in* Annu. Rep. N.Y. State Mus. 32:32. 1879.
From Annapolis, Cumberland and Digby Co. 17 Sept. 1952-K.A.H. (KM-2058, 3825-3828, 5145, 5370, 5487 *in* DAOM).

Russula cyanoxantha (Schaeff. ex Schw.) Fr. *in* Hymen. Eur., ed. 2:446. 1874.
On humus under mixed woods. Colchester Co. 18 July 1931-A.H.S., L.E.W. (W-658).

Russula decolorans Fr. *in* Epicr. Syst. Mycol.:361. 1838.
In mixed woods. Colchester Co. 19 Aug. 1931-A.H.S., L.E.W. (W-796).

Russula densifolia Gill. *in* Champ. Fr.:231. 1876.
On humus under mixed woods. Colchester Co. 14 July 1931-A.H.S., L.E.W. (W-622, 622a).

Russula emetica (Schaeff. ex Fr.) S.F. Gray *in* Nat. Arr. Br. Pl. 1:618. 1821 (Fig. 20).
In sphagnum bogs and open woods. Colchester, Kings and Shelburne Co. 1908-A.H.M. (KM-531 *in* DAOM, K.A.H.) (L.E.W.-535).

★**Russula flaviceps** Pk. *in* Annu. Rep. N.Y. State Mus. 53:843. 1900.
In wooden ravine. Kings Co. 24 Sept. 1952-K.A.H. (KM-1808 *in* DAOM).

Russula flavida Frost. & Pk. apud Pk. *in* Bull. N.Y. State Mus. 1(2):11. 1887.
From Lunenburg Co. 1913-A.H.M.

Russula foetens (Pers. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:359. 1838.
In Grove's sense this is *Russula fragrantissima* Romagn., fide S.A. Redhead.
In conifers woods. Annapolis, Colchester, Hants, Kings, Pictou and Victoria Co. 1913-A.H.M. (KM-486, 3829, 5372 *in* DAOM, K.A.H.) (L.E.W.-230, 620).

Russula fragilis (Pers. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:359. 1838.
Russula emetica (Schaeff. ex Fr.) Pers. ex S.F. Gray subsp. *fragilis* (Pers. ex Fr.) Sing. (1951).
Russula fallax (Fr.) Sacc.
On conifer duff. Colchester and Kings Co. 1930-A.H.S., L.E.W. (W-123, 526, 526a, 654) (KM-482, 487, 3823, 5371 *in* DAOM, K.A.H.).

Russula heterophylla (Fr.) *in* Epicr. Syst. Mycol.:352. 1838.
Russula furcata (Lam.) Fr.
Russula rigida Vel. (Sing. 1975).
From Halifax, Lunenburg and Shelburne Co. 1908-A.H.M. (KM-1493 *in* DAOM, K.A.H.).

★**Russula imitatrix** Homola & Schaffer *in* Mycologia 67:428. 1975.
In coniferous and coniferous-deciduous forests, especially under *Pinus strobus* L. (white pine) and *Tsuga canadensis* (L.) Carr. (hemlock). Kings Co. 29 July 1972-K.A.H. (MICH 11659).

Russula integra (L. ex Vitt.) Fr. *in* Epicr. Syst. Mycol.:360. 1838.
On soil under *Abies* sp. (fir). Colchester Co. 1 July 1931-A.H.S., L.E.W. (W-546, 625a).

Russula lutea (Huds. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:363. 1838.
From Kings Co. 8 Aug. 1936-K.A.H. (KM-549 *in* DAOM).

Russula mariae Pk. *in* Annu. Rep. N.Y. State Mus. 24:75. 1872.
On humus and grassy ground. Colchester and Kings Co. 21 July 1929-A.H.S., L.E.W. (W-162) (KM-488, 851, 5373 *in* DAOM, K.A.H.).

Russula neglecta Sing. *in* Sydowia 5:470. 1951.
Russula chamaeleontina (Fr.) Fr.
Russula neglecta (Sing.) Hora (1960).
Under *Abies* sp. (fir). Colchester Co. 8 July 1931-A.H.S., L.E.W. (W-585).

Russula nigricans (Bull. ex Mérat) Fr. *in* Epicr. Syst. Mycol.:350. 1838.
In Grove's sense this is probably *Russula dissimulans* Shaffer, fide S.A. Redhead.
In mixed woods. Cape Breton, Colchester and Kings Co. 4 Aug. 1931-A.H.S., L.E.W. (W-722, 722a) (KM-489, 3830-3834, 3846, 5374 *in* DAOM, K.A.H.).

Russula ochroleuca (Pers.) Fr. *in* Epicr. Syst. Mycol.:358. 1838.
From Kings Co. 30 July 1930-K.A.H. (KM-490, 2021 *in* DAOM).

Russula ochroleucoides Kauff. *in* Mycologia 9:165. 1917.
Russula dura Burl.
On humus under hardwoods. Colchester Co. 9 Sept. 1931-A.H.S., L.E.W. (W-860).

Russula peckii Sing. *in* Mycologia 35:147. 1943.
On ground. 1975-L.P.M., J.M.M.

Russula puellaris Fr. *in* Epicr. Syst. Mycol.:363. 1838.
From Kings Co. 26 Sept. 1938-K.A.H. (KM-848 *in* DAOM).

Russula pulchella Borszczow *in* Fungi Ingrici, tab. 2. 1857.
Russula depallens (Pers.) Fr.
Under *Picea* sp. (spruce). Halifax, Kings and Lunenburg Co. 1908-A.H.M. (KM-853 *in* DAOM, K.A.H.).

Russula pulverulenta Pk. *in* Bull. Torrey Bot. Club 29:70. 1902.
From Kings Co. 8 Aug. 1936-K.A.H. (KM-855 in DAOM).

Russula rugulosa Pk. *in* Annu. Rep. N.Y. State Mus. 54:179. 1901.
Under *Tsuga* sp. (hemlock). Colchester Co. 8 July 1931-A.H.S., L.E.W. (W-588).

Russula sanguinea (Bull. ex St. Amans) Fr. *in* Epicr. Syst. Mycol.:351. 1838.
In woods of *Pinus* sp. (pine). Halifax Co. 1881-J.S. (A.H.M.).

Russula sericeonitens Kauff. *in* Rep. Mich. Acad. Sci. 11:84. 1909.
Under hardwoods. Colchester Co. 9 July 1931-A.H.S., L.E.W. (W-594).

Russula sphagnophila Kauff. *in* Rep. Mich. Acad. Sci. 11:86. 1909.
Under *Picea* sp. (spruce). Colchester Co. 4 July 1931-A.H.S., L.E.W. (W-571).

Russula squalida Pk. *in* Bull. N.Y. State Mus. 116:80. 1907.
Under mixed woods. Colchester and Kings Co. 1930-A.H.S., L.E.W. (W-85, 537) (KM-493, 494 *in* DAOM, K.A.H.).

Russula subdepallens Pk. *in* Bull. Torrey Bot. Club 23:412. 1896.
Under hardwoods. Halifax and Kings Co. 30 July 1931-A.H.S., L.E.W. (W-717) (KM-854 *in* DAOM, K.A.H.).

Russula subfoetens W.G. Smith *in* J. Bot.:337. 1873.
Russula foetens (Pers. ex Fr.) Fr. var. *minor* Sing.
Russula foetentula Pk.
From Kings Co. 8 Aug. 1936-K.A.H. (KM-857 *in* DAOM).

Russula tenuiceps Kauff. *in* Rep. Mich. Acad. Sci. 11:81. 1909.
Under hardwoods. Colchester Co. 27 July 1931-A.H.S., L.E.W. (W-707).

Russula variata (Bann.) Pk. *in* Bull. N.Y. State Mus. 105:41. 1906.
Russula cyanoxantha (Schaeff. ex Schw.) Fr. var. *variata* (Bann. apud Pk.) Sing. (1951).
Russula variata Bann.
In mixed woods. Colchester, Guysborough, Halifax and Kings Co. 1913-A.H.M. (L.E.W.-710, 710a) (KM-495, 852, 3836, 3837 *in* DAOM, K.A.H.).

Russula veternosa Fr. *in* Epicr. Syst. Mycol.:354. 1936-1838.
Russula schiffneri Sing. (1929).

From grove of *Pinus* sp. (pine). Halifax Co. 1880-J.S. (KM-1733 *in* DAOM, K.A.H.).

Russula virescens (Schaeff. ex Zanted.) Fr. *in* Epicr. Syst. Mycol.:355. 1838.
Under mixed woods. Colchester Co. 28 July 1931-A.H.S., L.E.W. (W-709).

Russula xerampelina (Schaeff.) Fr. *in* Epicr. Syst. Mycol.:356. 1838.
In mixed woods. Colchester and Kings Co. 14 July 1931-A.H.S., L.E.W. (W-623) (KM-850 *in* DAOM, K.A.H.).

Rutstroemia macrospora (Pk.) Kanouse apud Wehm. *in* Can. J. Res. 18:547. 1940.
On decorticated wood. Colchester Co. 26 July 1929-L.E.W. (W-96, 1090, 1329 det. B.B.K.).

Saccardia quercina Cke. *in* Grevillea 7:49. 1878.
On *Bidens* sp. (beggar-ticks). Pictou Co. 1909-H.H.M., E.T.P. (A doubtful determination, L.E.W., 1950).

Saccobolus kerverni (Crouan) Boud. *in* Ann. Sci. Nat., Sér. 5, 10:229. 1869.
On bear dung. Colchester Co. 24 July 1931-L.E.W. (W-1497).

Saprolegnia diclina Humphrey *in* Trans. Am. Philos. Soc. 17, 3 tab. 17. 1892.
From Cape Breton Co. 1913-C.L.M.

Saprolegnia monoica Pingsh. *in* Jahrb. Wiss. Bot. 1:292. 1858.
From Cape Breton Co. 1913-C.L.M.

Sapromyces sp.
From Cape Breton Co. 1913-C.L.M. (described and figured but not identified specifically).

Sarcodontia crocea (Schulz.) Kotl. *in* Česká Mykol. 7:117. 1953.
Hydnum setulosum Berk. & Curt.
Sistotrema croceum Schw.
Steccherinum setulosum (Berk. & Curt.) Miller.
On *Fagus grandifolia* Ehrh. (beech). 1975-L.P.M., J.M.M.

Sarcoscypha coccinea (Fr.) Lamb. *in* Mem. Soc. R. Sci. Liege 2, 14:302. 1887.
Plectania coccinea (Scop.) Fckl.
From Halifax Co. 1908-A.H.M. (KM-1516 *in* DAOM, coll. H.J.H., A.D.P.).

Sarcotrochila balsameae (Davis) Korf *in* Mycologia 54:29. 1962.
Phacidium balsameae Davis.
Stegopezizella balsameae (Davis) Syd.
On *Abies balsamea* (L.) Mill. (balsam fir). 1975-L.P.M., J.M.M.

Sarcotrochila piniperda (Rehm) Korf *in* Mycologia 54:30. 1962.
Phacidium expansum Davis.
On *Picea glauca* (Moench) Voss (white spruce). 1975-L.P.M., J.M.M.

Schizophyllum commune Fr. *in* Syst. Mycol. 1:330. 1821.
On old logs and branches of *Abies* sp. (fir), *Acer* sp. (maple), *Aesculus* sp. (horse chestnut), *Betula* sp. (birch), *Fagus* sp. (beech), *Malus* sp. (apple), *Picea* sp. (spruce), *Prunus* sp. (choke cherry) and *Salix* sp. (willow). General. 1881-J.S. (A.H.M.) (L.E.W.-1121) (DAOM 112187, K.A.H.) (KM-501, 502, 536, 1267, 5417 *in* DAOM, K.A.H.).

★**Schroeteria delastrina** (Tul.) Wint. *in* Rabenhorst, Kryptogamenfl. Pilze 1:117. 1884.
Smut on *Veronica arvensis* L. (field-speedwell). Kings Co. 30 June 1976-C.O.G., K.A.H. (DAOM 158339 det. J.A.P.).

Scleroderma aurantium (Vaill.) Pers. *in* Syn. Fung.:153. 1801.
Scleroderma vulgare Fr.
On soil, humus or much decayed wood. General. 1881-J.S. (KM-952, 1091, 1092 *in* DAOM).

Scleroderma bovista Fr. *in* Syst. Mycol. 3:48. 1829, non sensu Guzman.
From Kings Co. 1977-S.F.M. (S.F.M.-40 *in* ACAD).

Scleroderma cepa Pers. *in* Syn. Fung.:155. 1801.
Scleroderma albidum Pat. & Trab.
From Kings Co. 1977-S.F.M. (S.F.M.-115 *in* ACAD).

Scleroderma citrinum Pers. *in* Syn. Fung.:153. 1801.
From Kings Co. 1977-S.F.M. (S.F.M.-285 *in* ACAD).

Scleroderma lycoperdoides Schw. *in* Syn. Fung. Carol.:350. 1822, var. **reticulatum** Coker & Couch *in* Gasteromyc. Eastern U.S.A. & Can.:170. 1928.
From Annapolis, Cape Breton, Hants, Kings, Lunenburg and Richmond Co. 1977-S.F.M. (S.F.M.-122, 123, 125, 166, 273, 291, 302, 388 *in* ACAD).

Scleroderma verrucosum (Bull.) Pers. *in* Syn. Fung.:154. 1801.
Scleroderma areolatum Ehrenb. (1818).
From Annapolis and Kings Co. 1977-S.F.M. (S.F.M.-142-145, 264, 265 *in* ACAD).

Sclerotinia kerneri (Wettst.) Sacc. *in* Syll. Fung. 8:197. 1889.
Peziza kerneri Wettst.
On *Abies balsamea* (L.) Mill. (balsam fir). 1941-E.K.C. (Plant Dis. Rep. 25:548. 1941).

Sclerotinia sclerotiorum (Lib.) DeBary. *in* Vergl. Morphol. Biol. Pilze Mycet. Bact.:236. 1884.
On many herbaceous hosts. General. 1924-J.F.H. (On *Aesculus hippocastanum* L. (horse chestnut), 2 July 1970-C.O.G., R.W.D. and *Forsythia* sp. June 1980-H. Taylor ACAD 13394).

Scolecobasidium terreum Abbott *in* Mycologia 19:29-31. 1927.
On leaves of *Malus pumila* Mill. (apple) that overwintered on the ground. Kings Co. May 1969-C.O.G., coll. R.G.R.

Scoleconectria cucurbitula (Tode ex Fr.) Booth *in* Commonw. Mycol. Inst. Mycol. Pap. 73:15-19. 1959.
See *Calonectria cucurbitula* (Tode ex Fr.) Sacc.

Scolecotrichum punctulatum Tracy & Earle *in* Bull. Torrey Bot. Club:178. 1895.
On *Gladiolus* sp. Colchester Co. Aug. 1929-L.E.W. (W-246).

Scopinella sphaerophila (Pk.) Malloch *in* Fungi Canadenses: 83. 1976.
Periconia sphaerophila Pk.
Phaeostoma sphaerophila (Pk.) Barr.
Sporocybe sphaerophila (Pk.) Sacc.
Parasitic on stromata of *Apiosporina morbosa* (Schw.) v. Arx (black knot) and on *Prunus pensylvanica* L.f. (pin cherry) and other *Prunus* spp. Shelburne Co. 16 May 1961. (DAOM 83805, Harrington).

★**Scopulariopsis stercoraria** (Link) Hughes *in* Can. J. Bot. 36:803. 1958.
Scopulariopsis brevicaule (Sacc.) Bain.
From seed of *Vicia faba* L. var. *minor* (Peterm.) Beck. (tick bean). Kings Co. 1 Feb. 1977-C.O.G.

Scorias spongiosa (Schw.) Fr. *in* Syst. Mycol. 3:291. 1829.
On *Abies balsamea* (L.) Mill. (balsam fir) and *Alnus* sp. (alder).
Colchester, Halifax and Yarmouth Co. 1908-A.H.M. (L.E.W.-1018).

Scutellinia albospadicea (Grev.) Kuntze *in* Rev. Gen. Pl. 2:869. 1891.
Lachnea albospadicea (Grev.) Phill.
Patella albospadicea (Grev.) Seav.
On bare soil. Colchester Co. 3 July 1931-L.E.W. (W-365, 418a,b,c).

Scutellinia erinaceus (Schw.) Kuntze *in* Rev. Gen. Pl. 2:869. 1891.
Lachnea erinaceus (Schw.) Sacc.
Patella erinaceus (Schw.) Morg.
Patella setosa (Nees) Seav.
On *Betula* sp. (birch). Colchester Co. 26 July 1929-L.E.W. (W-79, 387).

Scutellinia fimetaria (Seav.) S.C. Teng. *in* Chung-Kuo Ti Chen-chun (Fungi of China):763. 1964.
Lachnea fimetaria (Seav.) Wehm.
Patella fimetaria Seav.
On cow dung. Kings Co. 10 July 1932-K.A.H. (KM-1162 *in* DAOM as *P. fimetaria*).

Scutellinia hemisphaerica (Weber ex Fr.) Kuntze *in* Rev. Gen. Pl. 2:869. 1891.
Lachnea hemisphaerica (Weber) Gill.
Patella albida (Schaeff.) Seav.
On moss from Cumberland and Inverness Co. 6 Aug. 1931-L.E.W. (W-1220, 1220a).

Scutellinia irregularis Clements *in* Bull. Torrey Bot. Club.:90. 1903.
Lachnea irregularis Sacc. & D. Sacc.
Patella irregularis (Clements) Seav.
From Kings Co. 5 Sept. 1938-K.A.H. (KM-1120 *in* DAOM).

Scutellinia scutellata (L. ex Fr.) Lambotte *in* Flore Mycol. Belg. Suppl. 299. 1887.
Lachnea scutellata (L.) Gill.
Patella scutellata (L.) Morg.
On *Betula* sp. (birch) and decayed wood. Colchester and Kings Co. 3 July 1931-L.E.W. (W-366, 366a) (KM-1118, 1163, 2194 *in* DAOM, K.A.H.).

Scutellinia umbrarum (Fr.) Lambotte *in* Flore Mycol. Belg. Suppl. 300. 1887.
Lachnea umbrorum Gill.
Patella umbrorum (Fr.) Seav.
On soil. Richmond Co. 3 Aug. 1931-L.E.W. (W-1237).

Scytinostroma galactinum (Fr.) Donk *in* Fungus 26:20. 1956.
Corticium galactinum (Fr.) Burt.
On *Abies balsamea* (L.) Mill. (balsam fir), *Betula lutea* Michx. f. (yellow birch), *Larix laricina* (DuRoi) Kock (larch), *Pinus banksiana* Lamb. (jack pine), *Thuja occidentalis* L. (white cedar), and *Tsuga canadense* (L.) Carr. (hemlock). Colchester, Halifax and Kings Co. July 1935-L.E.W. (W-1756, 1756a-c) fide H.S.J. (KM-2825, 4279 det. L.K.W. *in* DAOM, K.A.H.).

Sebacina epigaea (Berk. & Br.) Rea *in* Trans. Br. Mycol. Soc. 17:48. 1932.
Tremella epigaea Berk. & Br.
On bark of *Acer* sp. (maple). Colchester Co. July & Sept. 1931-L.E.W. (W-1062, 1473).

Sebacina incrustans (Fr.) Tul. *in* J. Linn. Soc. Bot. 13:36. 1871.
On roots of trees and base of fern fonds. Colchester and Victoria Co. 5 Aug. 1931-L.E.W. (W-1230, 1230a).

Seimatosporium hypericinum (Ces.) Sutton *in* Trans. Br. Mycol. Soc. 64:483. 1975.
Diploceras hypericinum (Ces.) Died.
On leaf of *Fragaria* sp. (cultivated strawberry). Annapolis Co. 15 June 1973-C.O.G. (DAOM 145368, 145369).

* **Seimatosporium lonicerae** (Cke.) Shoem. *in* Can. J. Bot. 42:417. 1964.
On twig of *Physocarpus opulifolius* (L.) Maxim. (common ninebark). Kings Co. 9 Aug. 1951-J.F.H., C.O.G. (DAOM 139994).

Sepedonium mycophilum (Pers.) Nees *in* Das System der Pilze und Schwämme 38:44. 1816-1817.
Sepedonium chrysospermum (Pers.) Fr.
See stat. perf. *Apiocrea chrysosperma* (Tul.) Syd.

Septobasidium pinicola Snell *in* Mycologia 14:58. 1922.
On *Picea glauca* (Moench) Voss (white spruce) and *Pinus strobus* L. (white pine). 1953. (For. Insect Dis. Surv.:26. 1953).

Septogloeum potentillae Allesch. *in* Ber. Bayer. Bot. Ges. 4:38. 1896.
On *Potentilla tridentata* Ait. (three-toothed cinquefoil). Inverness Co. Aug. 1956-D.B.O.S. (Savile 3270 *in* DAOM).

Septoria aciculosa Ell. & Ev. *in* Syll. Fung. 3:511. 1884.
On leaves and petioles of *Fragaria* sp. (cultivated strawberry). Colchester and Kings Co. 17 Oct. 1957-C.O.G.

Septoria alni Sacc. *in* Michelia 1:177. 1878.
On *Alnus crispa* (Ait.) Pursh var. *mollis* Fern. (downy alder) and *A. rugosa* (DuRoi) Spreng. (speckled alder). Kings and Queens Co. 3 Sept. 1952-D.W.C., D.B.O.S.

Septoria apii (Bri. & Cav.) Chester *in* Bull. Torrey Bot. Club 18:373. 1891.
Septoria apii-graveolentis Dorogin.
Septoria petroselini Desm. var. *apii* Bri. & Cav.
On *Apium graveolens* L. var. *dulce* Pers. (celery). Kings Co. 4 Sept. 1934-K.A.H.

★ **Septoria astragali** Rob. & Desm. *in* Ann. Sci. Nat. 19:345. 1843.
On leaves of *Lathyrus japonicus* Willd. (beach pea). Lunenburg Co. 16 Aug. 1947-J.F.H., D.B.O.S.

★ **Septoria atropurpurea** Pk. *in* Annu. Rep. N.Y. State Mus. 33:25. 1880.
On leaves of *Aster macrophyllus* L. (large-leaved aster). Hants Co. 20 July 1953-J.S.E., D.W.C.

Septoria betulae (Lib.) Westend. *in* Saccardo, Michelia 1:177. 1878.
On *Betula alba* L. (white birch), *B. lutea Michx.* f. (yellow birch) and *B. populifolia* Marsh. (wire birch). Kings, Richmond and Yarmouth Co. 1950-L.E.W. (O-984 det. J.D.) (1953-D.W.C., D.B.O.S.).

Septoria betulina Pass. *in* Syll. Fung. 3:506. 1884.
On leaves of *Betula alba* L. (white birch) and *B. populifolia* Marsh. (wire birch). Shelburne Co. 1953-D.W.C.

★ **Septoria brunellae** Ell. & Holw. *in* J. Mycol. 1:6. 1885.
On leaves of *Prunella vulgaris* L. (heal-all). Queens Co. 10 Aug. 1953-D.W.C.

Septoria canadensis Pk. *in* Annu. Rep. N.Y. State Mus. 32:39. 1879.
Causing fruit rot on *Cornus canadensis* L. (bunchberry). Colchester Co. June 1929-L.E.W. (W-3, 1450) (Kings Co. 11 Sept. 1975-C.O.G.).

Septoria chrysanthemi Allesch. *in* Verz. Sud-Bay. Pilze 3:57. 1891.
On *Chrysanthemum* sp. (chrysanthemum) in greenhouse. Annapolis and Hants Co. 20 Sept. 1938-J.F.H.

★ **Septoria convolvuli** Desm. *in* Ann. Sci. Nat. Bot. Sér. 2, 17:108. 1842.
On *Convolvulus sepium* L. (field-bindweed). Kings Co. 13 Sept. 1951-D.W.C.

Septoria coptidis Berk. & Curt. *in* Grevillea 3:8. 1874.
See stat. perf. *Mycosphaerella coptis* (Schw.) House.

Septoria cornicola Desm. *in* Pl. Crypt. Fr.:342. 1825-51.
On *Cornus alternifolia* L.f. (alternate-leaved dogwood) and *C. stolonifera* Michx. (red osier dogwood). Kings Co. 4 Aug. 1952-D.W.C. (coll. by R. Morehouse and B. Fuller, respectively).

Septoria corylina Pk. *in* Annu. Rep. N.Y. State Mus. 34:44. 1881.
On *Corylus cornuta* Marsh. (hazelnut). Colchester and Kings Co. July 1931-L.E.W. (W-1688).

Septoria cucurbitacearum Sacc. *in* Fung. Ven. Novi vel Critici, Ser. 5:205. 1876.
On *Citrullus vulgaris* Schrad. var. *citroides* Bailey (citron), *Cucumis sativus* L. (cucumber) and *Cucurbita maxima* Duchesne (squash). Kings, Lunenburg and Yarmouth Co. 17 Sept. 1953-K.A.H., D.W.C.

Septoria divaricata Ell. & Ev. *in* J. Mycol. 5:151. 1889.
On *Phlox drummondii* Hook. (Texan pride) and *P. paniculata* L. (perennial phlox). Kings and Yarmouth Co. 24 July 1935-J.F.H.

★ **Septoria elymi** Ell. & Ev. *in* J. Mycol. 7:132. 1892.
Septoria agropyri Ell. & Ev.
On *Agropyron repens* (L.) Beauv. (couch grass). Cape Breton Co. 14 Aug. 1962-C.O.G.

Septoria galeopsidis Westend. *in* Bull. Acad. R. Sci. Belg. 6, Sér. 2, 12(7):36. 1861.
On *Galeopsis tetrahit* L. var. *bifida* (Boenn.) Lej. & Court. (hemp-nettle). Cape Breton, Queens and Kings Co. 7 July 1925-J.F.H.

Septoria gladioli Pass. *in* Rabenhorst, Fung. Eur. Exs.:1956. 1875.
On corms of *Gladiolus hortulanus* Bailey. Kings Co. 4 Jan. 1943-J.F.H.

★ **Septoria glycines** Hemmi *in* Trans. Sapporo Nat. Hist. Soc. 6:12-17. 1915.
On foliage of *Glycine max* (L.) Merr. (soybean). Kings Co. 31 Aug. 1977-R.W.D., C.O.G.

Septoria helianthi Ell. & Kellerm. *in* Am. Nat. 17:1165. 1883.
On *Helianthus* sp. (sunflower). Cumberland and Kings Co. 9 Sept. 1929-J.F.H.

★ **Septoria increscens** Pk. *in* Annu. Rep. N.Y. State Mus. 33:25. 1880.
On leaves of *Trientalis borealis* Raf. (starflower). Kings Co. 23 June 1953-D.W.C.

★ **Septoria lapparum** Sacc. *in* Michelia 1:184. 1878.
On *Arctium minus* (Hill.) Bernh. (common burdock). Kings Co. 21 Feb. 1951-D.W.C.

Septoria leucanthemi Sacc. & Speg. *in* Michelia 1:191. 1878.
On *Chrysanthemum leucanthemum* L. var. *pinnatifidum* Lecoq & Lamotte (oxeye daisy) and C. *morifolium* (Ramat.) Hemsl. Annapolis and Kings Co. Jan. 1958-K.A.H.

Septoria levistici Westend. *in* Herb. Crypt. Belg.:935. 1854.
Septoria ligustici Guba.
On *Ligusticum scothicum,* L. (Scotch lovage). Pictou Co. Aug. 1956-D.B.O.S. (Can. J. Bot. 35:197. 1957).

Septoria lycopersici Speg. *in* Fung. Argent. Pug. 4.289. 1881.
Causing leaf spot of *Lycopersicon esculentum* Mill. (tomato). General. 15 Aug. 1934-J.A.B.

★ **Septoria nabali** Berk. & Curt. *in* North Am. Fungi:438 (from Ann. Mag. Nat. Hist. 1853-59).
On leaves of *Prenanthes trifoliolata* (Cass.) Fern. (lion's-paw). Shelburne Co. 2 Aug. 1953-D.W.C.

Septoria nodorum Berk. *in* Gard. Chron.:601. 1845.
See stat. perf. *Leptosphaeria nodorum* Müller.

Septoria oenotherae Westend. *in* Herb. Crypt. Belg.:1152. 1841-59.
On *Oenothera biennis* L. (evening primrose) and *O. perennis* L. (sundrops). General. 1913-A.H.M.

Septoria ostryae Pk. *in* Annu. Rep. N.Y. State Mus. 33:25. 1880.
On *Ostrya virginiana* (Mill.) K. Koch (ironwood). Kings Co. 9 Sept. 1952-D.W.C., I.V.H.

Septoria paeoniae Westend. *in* Bull. Acad. R. Sci. Belg. 19(9):17. 1852.
On *Paeonia* sp. (peony). Kings Co. 26 May 1927-J.F.H.

★ **Septoria passerinii** Sacc. *in* Syll. Fung. 3:560. 1884.
On *Hordeum vulgare* L. (barley). Cumberland Co. 19 Aug. 1964-C.O.G.

Septoria phlogis Sacc. & Speg. *in* Michelia 1:184. 1878.
Septoria drummondii Ell. & Ev.
On *Phlox drummondii* Hook. (Texan pride). Kings Co. 24 July 1935-J.F.H. (probably not distinct from *S. divaricata,* fide I.L.C.).

Septoria pisi Westend. *in* Herb. Crypt. Belg. 1378. 1841-59; also Bull. Acad. R. Sci. Belg. Ser. 2, 12(7):36. 1861.
On *Pisum sativum* L. (garden pea). Annapolis and Kings Co. 10 July 1941-J.F.H.

Septoria polygonorum Desm. *in* Ann. Sci. Nat. Bot., Sér. 2, 17:108. 1842.
On *Polygonum persicaria* L. (lady's thumb). Kings Co. 12 Sept. 1935-J.F.H.

★**Septoria pruni** Ell. *in* Am. Nat.:811. 1882.
On *Prunus virginiana* L. (choke cherry). Cape Breton Co. 14 Aug. 1962-C.O.G.

Septoria rubi Westend. *in* Herb. Crypt. Belg.:938. 1854; also Kickx, Mem. Acad. Sci. Brux. 13:433. 1841.
See stat. perf. *Mycosphaerella rubi* Roark.

★**Septoria sambucina** Pk. *in* Annu. Rep. N.Y. State Mus. 28:58. 1876.
On *Sambucus pubens* Michx. (red-berried elder). Kings Co. 18 Sept. 1951-D.W.C.

Septoria sedi Westend. *in* Herb. Crypt. Belg.:943. 1841-59; also Kickx, Flore Crypt. Flandres 2:429. 1867.
On *Sedum telephium* L. (live-forever). 1944. (Can. Plant Dis. Surv.:116. 1944).

Septoria senecionis Westend. *in* Bull. Acad. R. Sci. Belg. 19:9. 1852.
On *Senecio jacobaea* L. (tansy ragwort). Antigonish and Guysborough Co. 1950-L.E.W. (Can. Plant Dis. Surv.:116. 1944).

Septoria sheperdiae (Sacc.) Dearn. *in* Mycologia 20:238. 1928.
On leaves of *Shepherdia canadense* (L.) Nutt. (shepherdia). Hants Co. 12 July 1945-J.F.H., D.B.O.S.

Septoria stellariae Rob. & Desm. *in* Ann. Sci. Nat. Bot., Sér. 3, 8:22. 1847.
On *Stellaria media* (L.) Cyrillo (common chickweed). Kings Co. 22 June 1937-J.F.H.

★**Septoria violae** Westend. *in* Herb. Crypt. Belg. Fasc. 2.91: 1841.
On *Viola pensylvanica* Michx. (yellow violet). Queens Co. 1 Aug. 1953-D.W.C.

Serpula lacrimans Pers. ex S.F. Gray var. **lacrimans** *in* Nat. Arr. Br. Pl. 1:637. 1821.
Merulius lacrimans Wulf. ex Fr.
On planks and cordwood, usually of conifers. General. 1881-J.S. (KM-99, 757, 5140, 5184, 5185 *in* DAOM, K.A.H.) (O-F5498).

Serpula lacrimans Pers. ex S.F. Gray var. **himantioides** (Fr.) Cke. *in* Mycologia 49:207. 1957.
Merulius himantioides Fr.
On *Abies balsamea* (L.) Mill. (balsam fir), *Larix laricina* (DuRoi) Koch (larch), *Pinus strobus* L. (white pine) and *Tsuga canadensis* (L.) Carr. (hemlock). Kings Co. and others. 1952-K.A.H. (KM-1831 *in* DAOM, det. R.M.).

Sirococcus strobilinus Preuss *in* Fungi Hoyersw.:306. 1852. Linnaea 26:716. 1853.
On *Pinus resinosa* Ait. (red pine). General. 1974. (For. Insect Dis. Surv.:31. 1974).

Sistotrema confluens Pers. ex Fr. *in* Syst. Mycol. 1:426. 1821.
On duff in woods of *Picea* sp. (spruce). Annapolis, Halifax and Kings Co. 1880-J.S. (KM-3118, 3440-3442, 4360, 4722, 4732-4735, 4898 *in* DAOM, K.A.H.).

★**Sistotremastrum suecicum** (Litsch. & Erikss.) Erikss. *in* Symb. Bot. Upsal. 16(1):62. 1958.
Corticium suecicum Litsch. apud Lundell.
On *Pinus resinosa* Ait. (red pine) and other coniferous wood. Colchester and Kings Co. 8 Nov. 1954-K.A.H. (KM-3075 det. Joan Spiers, 4280, 4281 det. L.K.W. *in* DAOM).

Solenia anomala (Pers.) Fr. *in* Hymen. Eur.:596. 1874.
See *Cyphellopsis anomala* (Pers. ex Fr.) Donk.

Solenia candida Hoffm. ex Fr. *in* Syst. Mycol. 2:300. 1823.
See *Henningsomyces candidus* (Pers.) Kuntze.

Solenia fasciculata Fr. *in* Syst. Mycol. 2:200. 1823.
See *Rectipilus fasciculata* (Pers.) Agerer.

Solenia filicina Pk. *in* Annu. Rep. N.Y. State Mus. 28:52. 1876.
See *Woldmaria crocea* (Karst.) W.B. Cke.

Solenia ochracea Hoff. ex Fr. *in* Syst. Mycol. 2:201. 1823.
See *Merismodes ochraceus* (Pers.) Reid.

Solenia polyporoidea Pk. *in* Annu. Rep. N.Y. State Mus. 41:86. 1888.
Solenia villosa Fr. var. *polyporoidea* Pk.
See *Henningsomyces candidus* (Pers.) Kuntze.

Sordaria appendiculata Auersw. *in* Niessl, Verh. Nat. Ver. Brünn 10(2):188. 1872.
On rabbit and porcupine dung. Colchester and Pictou Co. 1913-A.H.M. (L.E.W.-178, 1145, 1145a, 1492).

Sordaria fimicola (Rob.) Ces. & de Not. *in* Comm. Soc. Critt. Ital. 1:226. 1863.
On moose dung. Halifax and Kings Co. 30 July 1931-L.E.W. det. R.B.

★ **Sordaria verruculosa** (Jensen) Sacc. *in* Syll. Fung. 24:845. 1928.
From golf green turf. Shelburne Co. 16 July 1964-C.O.G.

Spathularia flavida Fr. *in* Syst. Mycol. 1:491. 1821.
On soil and duff. Colchester and Kings Co. 26 Aug. 1927-L.E.W. (W-63a,b leg. A.H.S., 6222 leg. A.R.P.) (ACAD 1027, 1027A, K.A.H.).

Spathularia velutipes Cke. & Farl. *in* Grevillea 12:37. 1883.
On decayed wood and humus. Annapolis, Antigonish, Colchester and Kings Co. 1908-A.H.M. (L.E.W.-52a, 6216 leg. A.R.P.) (ACAD 1028, K.A.H.).

Sphaceloma rosarum (Pass.) Jenk. *in* J. Agric. Res. 45:330. 1932.
Gloeosporium rosarum (Pass.) Grove.
On fruits of *Rosa* sp. (rose). Colchester Co. June 1933-L.E.W. (W-1530).

★**Sphaceloma symphoricarpi** Barrus & Horsfall *in* Phytopathology. 18:799. 1928.
On leaves of *Symphoricarpos albus* (L.) Blake var. *laevigatus* (Fern.) Blake (snowberry, waxberry). Kings Co. Sept. 1963-K.A.H.

Sphacelotheca destruens (Schlecht.) Stev. & A.G. Johns *in* Phytopathology. 34:613. 1944
Ustilago destruens (Schlecht.) Rabenh. apud Klotzsch.
On *Panicum miliaceum* L. (millet). Cumberland Co. 1934-I.L.C. (coll. K. Cox) (O-7749).

Sphaerellopsis filum (Biv.-Bern. ex Fr.) Sutton *in* Commonw. Mycol Inst. Mycol. Pap. 141:196. 1977.
Ascochyta graminicola Sacc.
Darluca filum (Biv.-Bern. ex Fr.) Berk.
See stat. perf. *Eudarluca caricis* (Fr.) Erikss.

Sphaerobolus stellatus Tode *in* Fungi Mecklenb. 1:43. 1790.
On wood of *Fagus* sp. (beech) and dung. Colchester, Halifax, Kings, Lunenburg and Pictou Co. 1 July 1931-L.E.W. (W-353, 354, 1182) (S.F.M.-79, 80, 81 *in* ACAD).

Sphaeronema acerinum Pk. *in* Annu. Rep. N.Y. State Mus. 24:86. 1872.
See stat. perf. *Dermea acerina* (Pk.) Rehm.

Sphaeronema peckii Sacc. & Syd. *in* Syll. Fung. 14:900. 1899.
Stat. perf. *Godroniopsis nemopanthis* Groves.
On stems of *Nemopanthus mucronata* (L.) Trel. (false holly). Colchester Co. June 1931. L.E.W. (W-304).

★**Sphaeronema pomorum** Shear *in* Bull. Torrey Bot. Club 34:307. 1907.
From fruit of *Vaccinium macrocarpon* Ait. (cranberry). Digby Co. 19 Oct. 1966-C.L.L., I.V.H.

★**Sphaeropsis cruenta** (Fr.) Gilman & Archer *in* Iowa State. Coll. J. Sci. 3:433. 1929.
Phoma maianthemi Pk.
Phyllosticta cruenta (Fr.) Kickx.
On leaves of *Maianthemum canadense* Desf. (wild lily-of-the-valley). Kings Co. 17 June 1953-D.W.C., G.L.M.

Sphaeropsis malorum Pk. *in* Annu. Rep. N.Y. State Mus. 34:36. 1881.
Sphaeropsis cerasina Pk.
Sphaeropsis sumachi (Schw.) Cke. & Ell.
See stat. perf. *Botryosphaeria obtusa* (Schw.) Shoem.
As *S. sumachi* on *Rhus typhina* L. (staghorn sumac). Halifax and Kings Co. 1936-J.F.H. (O-4325 det. I.L.C.).

✱**Sphaeropsis physocarpi** Ell. & Ev. *in* Proc. Acad. Nat. Sci. Phila.:361. 1894
On wood of *Physocarpus opulifolius* (L.) Maxim. (common ninebark). Kings Co. 9 Aug. 1951-J.F.H.

Sphaerospora brunnea (Alb. & Schw.) Massee *in* Br. Fung. Flora 4:295. 1895.
Among moss on charred logs. Colchester Co. 16 July 1931-L.E.W. (W-406).

Sphaerotheca fuliginea (Schlecht. ex Fr.) Poll. *in* Atti R. Ist. Bot. Univ. Pavia 2(9):8. 1905.
Sphaerotheca humuli (DC.) Burr. var. *fuliginea* (Schlecht.) Salm.
Powdery mildew on *Bidens cernua* L. (nodding bur-marigold), *B. frondosa* L. (common beggar-ticks), *Prenanthes altissima* L. (bird-bell), *Prunella vulgaris* L. (heal-all) and *Taraxacum officinale* Weber (dandelion). General. 1909-W.P.F.

Sphaerotheca macularis (Wallr. ex Fr.) P. Magn. *in* Bot. Centralbl. 77:10. 1899.
Sphaerotheca humuli (DC.) Burr.
Powdery mildew on many hosts including species of *Agrimonia* (agrimony), *Bidens* (beggar-ticks), *Fragaria* (strawberry), *Physocarpus* (ninebark), *Potentilla* (marsh cinquefoil), *Rosa* (rose), *Rubus* (brambles) and *Taraxacum* (dandelion). General. 1909-W.P.F. (DAOM 1930, 4942, 170962 and 170963 with cleistothecia on leaves of *Fragaria* sp.).

Sphaerotheca mors-uvae (Schw.) Berk. & Curt. *in* Grevillea 4:158. 1876.
Powdery mildew on *Ribes grossularia* L. (gooseberry), *R. nitgrum* L. (black currant) and *R. sativum* Syme (red currant). General. 1909-W.P.F.

Sphaerotheca pannosa (Wallr. ex Fr.) Lév. *in* Ann. Sci. Nat. Bot., Sér 3, 15:138. 1851.
Erysiphe pannosa Fr.
Powdery mildew on *Prunus persica* (L.) Batsch (peach) and *Rosa* spp. (rose). General. 11 July 1929-J.F.H.

Sphaerulina orae-maris Linder *in* Barghoorn & Linder, Farlowia 1:413. 1944.
On intertidal wood. Kings Co. 1970-G.A.N.

Spongipellis spumeus (Sow. ex Fr.) Pat. *in* Hymén. Eur. 137. 1887.
Polyporus spemeus (Sow.) Fr.
Tyromyces spumeus (Sow. ex Fr.) Imaz. var. *spumeus*.
On *Populus* sp. (poplar). Halifax Co. 1881-J.S. (A.H.M.).

Spongospora subterranea (Wallr.) Lagerh. *in* J. Mycol. 7:104. 1892.
On *Solanum tuberosum* L. (potato). General. 25 Sept. 1926-J.F.H.

Sporidesmium foliculatum (Cda.) Mason & Hughes apud Hughes *in* Can. J. Bot. 31:609. 1953.
Helminthosporium orthospermum Sacc. & Fairm.
On roots of *Rubus idaeus* L. var. *strigosus* (Michx.) Maxim. (wild red raspberry). Kings Co. Feb. 1943-J.F.H. (det. D.H.Linder).

Sporonema oxycocci Shear *in* Bull. Torrey Bot. Club 34:308. 1907.
On *Vaccinium macrocarpon* Ait. (cranberry). Yarmouth Co. 15 Jan. 1951-E.L.E., K.A.H.

Sporormia ambigva Niessl *in* Oesterr. Bot. Z. 28:97. 1878.
On horse dung. Colchester Co. 22 Aug. 1931-L.E.W. (W-1393).

✱**Sporormia leporina** Niessl *in* Oesterr. Bot. Z. 28:44, 96. 1878.
On overwintered leaves of *Malus pumila* MIll. (apple) and from tuber of *Solanum tuberosum* L. (potato). Kings Co. 14 June 1963-C.O.G.

Sporarmia minima Auersw. *in* Hedwigia 7:66. 1868.
Isolated from sheep rumen contents. Cumberland Co. Summer 1969-D.B., A.T.

***Sporothrix** sp. Hektoen & Perkins *in* J. Exp. Med. 5:80. 1900.
On *Pinus resinosa* Ait. (red pine) and on twig of *Rhododendron* sp. Kings Co. 1972-C.O.G.

Stachybotrys chartarum (Ehrenb. ex Link) Hughes *in* Can. J. Bot. 36:812. 1958.
Stachybotrys atra Cda.
On calyx of *Fragaria* sp. (cultivated strawberry) and from milled peat, *Sphagnum* sp. Kings Co. 1961-C.O.G.

***Stachylidium bicolor** Link *in* Mag. Ges. Naturforsch. Freunde Berl. 3(1):15. 1809.
Stachylidium verticillatum (Pers.) Hughes (Can. J. Bot. 36:813. 1958).
From diseased stem of *Pisum sativum* L. (garden pea). Kings Co. July 1967-C.O.G.

***Stagonospora atriplicis** (Westend) Lind *in* Danish Fungi:444. 1913.
On leaves of *Atriplex patula* L. (orach) and *Chenopodium album* L. (lamb's quarters). Cape Breton and Yarmouth Co. 11 Sept. 1952-D.W.C., C.O.G., A.E.R.

***Stagonospora curtisii** (Berk.) Sacc. *in* Syll. Fung. 3:451. 1884.
From leaves of *Amaryllis* sp. from greenhouse. Kings Co. 1 Apr. 1969-K.A.H., C.O.G.

***Stagonospora rubi-albida** Dearn. & House *in* Circ. N.Y. State Mus. 24:48. 1940.
On leaves of *Brachyelytrum erectum* (Schreb.) Beauv. var. *glabratum* (Vasey) Koyama & Kawano (Can. J. Bot. 42:866. 1964. fig. 25,b) (a grass). Queens Co. 12 Aug. 1953-D.W.C.

***Stagonospora spiraeae** Dearn. *in* Mycologia 8:103. 1916.
On wood of *Spiraea* sp. (cultivated flowering shrub). Kings Co. 10 June 1952-D.W.C.

Steccherinum ochraceum (Pers. ex Fr.) S. F. Gray *in* Nat. Arr. Br. Pl. 1:651. 1821.
Mycoleptodon ochraceum (Pers.) Pat.
On *Alnus* sp. (alder), *Betula* sp. (birch) and *Fagus grandifolia* Ehrh. (beech). Colchester and Kings Co. 23 July 1931-L.E.W. (W-1120, 1806) (KM-110, 3438 *in* DAOM, K.A.H.) (O-F5474).

Steccherinum pusillum (Brot.) Banker *in* Mycologia 4:313. 1912.
See *Mycoleptodonoides pusillum* (Fr.) Harrison.

Steccherinum septentrionale (Fr.) Banker *in* Mem. Torrey Bot. Club 12:130. 1906.
See *Climacodon septentrionalis* (Fr.) Karst.

Steccherinum setulosum (Berk. & Curt.) Miller *in* Mycologia 27:362. 1935.
See *Sarcodontia crocea* (Schulz.) Kotl.

Steganosporium ovatum (Pers.) Keissl. *in* Ann. Nat. Hofmus. Wien 29:461. 1915.
Steganosporium ovatum (Pers. ex Mérat) Hughes (Can. J. Bot. 36:813. 1958).
Steganosporium pyriforme (Hoffm. ex Fr.) Cda.
On *Acer platanoides* L. (Norway maple), *A. saccharum* Marsh. (sugar maple) and other *Acer* spp. Colchester and Kings Co. July 1933-K.A.H. (O-2048 det. M. Timonin, 4856 det. I.L.C.).

Stemonitis axifera (Bull.) Macbr. *in* North Am. Slime-Moulds. 120. 1889.
On old logs. Colchester and Pictou Co. 1906-C.L.M. (L.E.W.-165, 390, 394, 423, 1499).

Stemonitis flavogenita Jahn *in* Verh. Bot. Ver. Brandenb. 45:165. 1904.
On conifer log. Colchester Co. 19 July 1929-L.E.W. (W-39).

Stemonitis fusca Roth *in* Mag. Bot. Romer Usteri 1(2):26. 1787.
On decayed *Fagus* sp. (beech), *Pinus* sp. (pine) and moss. Colchester and Pictou Co. 1906-C.L.M. (L.E.W.-425, 1335).

Stemphylium botryosum Wallr. *in* Flora Crypt. Germ. 2:300. 1833.
See stat. perf. *Pleospora herbarum* (Pers. ex Fr.) Rabenh.

Stemphylium maritimum Johnson *in* Mycologia 48:841. 1956.
On *Spartina alterniflora* Loisel. (cord-grass). Kings Co. 9 Nov. 1975-G.J.B., D.W.G.

Stemphylium sarciniforme (Cav.) Wilts. *in* Trans. Br. Mycol. Soc. 21:224-228. 1938.
On *Medicago sativa* L. (alfalfa) and *Trifolium pratense* L. (red clover). Kings Co. 29 July 1925-J.F.H.

✱**Stemphylium vesicarium** (Wallr.) Simmonds *in* Mycologia 61:9-12. 1969.
On leaves of *Lycopersicon esculentum* Mill. (tomato). Kings Co. 1 Dec. 1969-C.O.G., R.A.S. (DAOM 137774).

Stereum chailletii (Pers.) Fr. *in* Elench. Fung. 1:188. 1828.
See *Amylostereum chailletii* (Pers.) Fr.

Stereum frustulatum (Pers. ex Fr.) Fckl. var. **frustulatum** *in* Jahrb. Nassau. Verein Naturkd. 15:102. 1861, (combination attributed to Fries).
Stereum frustulosum (Pers.) Fr.
Xylobolus frustulatus (Pers. ex Fr.) Karst.
On *Quercus rubra* L. (red oak). Kings Co. 9 Aug. 1936-K.A.H. (KM-766 *in* DAOM) (O-F3792).

Stereum frustulatum (Pers. ex Fr.) Fckl. var. **subpileatum** (Berk. & Curt.) Welden *in* Mycologia 63:797. 1971
Stereum subpileatum Berk. & Curt.
Xylobolus subpileatus (Berk. & Curt.) Boid.
On *Malus pumila* Mill. (apple), *Quercus rubra* L. (red oak) and *Quercus* sp. 1975-L.P.M., J.M.M.

Stereum hirsutum (Willd. ex Fr.) S.F. Gray *in* Nat. Arr. Br. Pl. 1:653. 1821.
On *Acer* sp. (maple), *Alnus rugosa* (DuRoi) Spreng. var. *americana* (Regel) Fern. (speckled alder), *Betula papyrifera* Marsh. (white birch), *Corylus cornuta* Marsh. (hazelnut), *Fagus grandifolia* Ehrh. (beech) and *Quercus* sp. (oak). General. 1881-J.S. (L.E.W.-1714. 1726) (KM-135, 135a,b, 136, 2786 *in* DAOM, K.A.H.).

Stereum ostrea (Blume & Nees ex Fr.) Fr. *in* Epicr. Syst. Mycol.:547. 1838.
Stereum fasciatum (Schw.) Fr.
On *Acer pensylvanicum L.* (striped maple), *A. saccharum* Marsh. (sugar maple), *Betula lutea* Michx. f. (yellow birch), *B. papyrifera* Marsh. (white birch), *Fagus grandifolia* Ehrh. (beech) and other species of hardwoods. Colchester, Digby, Kings and Pictou Co. 1908-A.H.M. (KM-134, 134a-c, 1565, 4320 *in* DAOM, K.A.H.).

Stereum rugosum (Pers. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:552. 1838.
See *Haematostereum rugosum* (Pers. ex Fr.) Pouz.

Stereum sanguinolentum (Alb. & Schw. ex Fr.) Fr. *in* Epicr. Syst. Mycol.:549. 1838.
See *Haematostereum sanguinolentum* (Alb. & Schw. ex Fr.) Pouz.

Stereum striatum (Fr.) Fr. *in* Epicr. Syst. Mycol.:551. 1838, var. **ochraceoflavum** (Schw.) Welden *in* Mycologia 63:797. 1971.
Stereum ochraceoflavum (Schw.) Ell.
On *Betula papyrifera* Marsh. (white birch). 1953. (For. Insect Dis. Surv.:26. 1953).

Stictis radiata Pers. *in* Obs. Mycol. 2:73. 1799, subsp. **radiata** *in* Mycotaxon 5:234. 1977.
On *Acer saccharum* Marsh. (sugar maple). *A. spicatum* Lam. (mountain maple) and *Betula* sp. (birch). Colchester Co. 15 July 1929-L.E.W. (W-66, 1036, 1044).

Stigmea conferta (Fr.) Fr. *in* Summa Veg. Scand.:421. 1849, (as *Stigmatea*).
Gibbera compacta (Pk.) Shear.
On leaves of *Vaccinium macrocarpon* Ait. (cranberry). Annapolis, Kings, Shelburne and Victoria Co. 2 Aug. 1938-J.F.H.

Stigmea pulchella (Cke. & Pk.) Barr *in* Can. J. Bot. 46:828. 1968, (as *Stigmatea*).
Venturia pulchella Cke. & Pk.
On leaves of *Chamaedaphne calyculata* (L.) Moench var. *angustifolia* (Ait.) Rehd. (leather leaf). Kings Co. 1950-L.E.W. (coll. A.E.R.).

Stigmea robertiana Fr. *in* Summa Veg. Scand.:421. 1849, (as *Stigmatea*).
On *Geranium robertianum* L. (herb Robert). Inverness Co. Aug. 1956-D.B.O.S.

Stigmina carpophila (Lév.) M.B. Ellis *in* Commonw. Mycol. Inst. Mycol. Pap. 72:, 56-58. 1959.
On leaves, twigs and fruit of *Prunus persica* (L) Batsch (peach). Kings Co. 26 Aug. 1970-C.O.G.

Stigmina negundinis (Berk. & Curt.) M.B.Ellis *in* Commonw. Mycol. Inst. Mycol. Pap. 72:44-45. 1959.
Coryneum negundinis Berk. & Curt.
On *Acer negundo* L. (box-elder). 1975-L.P.M., J.M.M.

Stigmina populi (Ell. & Ev.) Pk. *in* Bull. N.Y. State Mus. 157:34. 1912.
On leaves of *Populus balsamifera* L. (balsam poplar). Antigonish Co. 6 Aug. 1953-J.S.E., D.W.C.

Stilbospora sp.
On leaves of *Hamamelis virginiana* L. (witch hazel). Digby Co. 12 Sept. 1952-D.W.C., A.E.R., D.B.O.S. (KP-1958 labeled *Hendersonia foliorum* Fckl. var. *hamamelidina* Fairm., See Can. Plant Dis. Surv.:104. 1952).

Strangulidium sericeomollis (Rom.) Pouz. *in* Česká Mykol. 21:206. 1967.
Polyporus sericeomollis Rom.
Poria sericeomollis (Rom.) Egel.
On *Abies balsamea* (L.)Mill. (balsam fir) and *Betula papyrifera* Marsh. (white birch). Kings Co. 6 Aug. 1933-K.A.H. (ACAD 105, 6515 det. L.O.O.) WS-240, 245, 281, 284, 298, 308, 311 *in* ACAD) (O-F5129).

Strasseria oxycocci Shear *in* U.S. Dep. Agric. Tech. Bull. 258:23. 1931.
On leaf of *Vaccinium macrocarpon* Ait. (cranberry). Inverness Co. 27 Jan. 1970-C.O.G.

Streptomyces scabies (Thaxt.) Waks. & Henrici *in* Bergey's Man., ed. 6:957. 1948.
On *Beta vulgaris* L. (beet), *Brassica napobrassica* (L.) Mill. (Swede turnip), *Daucus carota* L. var. *sativa* DC. (carrot), *Pastinaca sativa* L. (parsnip) and *Solanum tuberosum* L. (potato). General. 22 Oct. 1925-W.K.M.

Strickeria obducens (Fr.) Wint. *in* Rabenhorst, Kryptogamenfl. Pilze (1)2:285. 1887.
Teichospora obducens (Fr.) Fckl.
On *Spiraea* sp. Colchester Co. 3 Sept. 1929-L.E.W. (W-268).

Stickeria vilis (Fr.) Wint. *in* Rabenhorst, Kryptogamenfl. Pilze (1)2:283. 1887.
On *Fagus grandifolia* Ehrh. (beech). Colchester Co. 1 July 1931-L.E.W. (W-351).

Strobilomyces floccopus (Vahl. ex Fr.) Karst. *in* Bidr. Finl. Nat. Folk 37:16. 1882.
Boletus floccopus Fr.
Boletus strobilaceus Scop. ex Fr.
Strobilomyces strobilaceus (Scop. ex Fr.) Berk.
In deciduous woods. Annapolis, Colchester, Cumberland and Kings Co. 10 Aug. 1931-A.H.S., L.E.W. (W-724) (KM-589, 755 *in* DAOM, K.A.H.) (ACAD 10382, D.W.G., K.A.H.).

Strobilurus albipilatus (Pk.) Wells & Kempton *in* Mycologia 63:377. 1971.
Marasmius uliginosus Gillium.
In mixed woods. Kings Co. 20 Sept. 1972-K.A.H. (MICH 12093 type, 12094).

Stromatinia gladioli (Drayton) Whetz. *in* Mycologia 37:674. 1945.
Sclerotinia gladioli (Massey) Drayton.
On corms of *Gladiolus* sp. Kings Co. 1952-J.F.H.

Stromatoscypha fimbriata (Pers. ex Fr.) Donk *in* Reinwardtia 1:219. 1951.
Porotheleum fimbriatum (Pers. ex Fr.) Fr.
On *Betula* sp. (birch), *Fagus* sp. (beech) and *Populus* sp. (poplar). General. 1881-J.S. (A.H.M.) as *P. friesii* Mont. (L.E.W.-1016, 1151, 1279) (ACAD 10579)

Stropharia aeruginosa (Curt. ex Fr.) Quél. *in* Champ. Jura et Vosges:141. 1872.
Geophila aeruginosa (Curt. ex Fr.) Quél.
Stropharia squamulosa (Massee) Massee.
From Halifax Co. 1913-A.H.M. (KM-2735, 5416 coll. R.P. Longley *in* DAOM, K.A.H.).

Stropharia aurantiaca (Cke.) Orton *in* Trans. Br. Mycol. Soc. 43:181. 1960.
Stropharia squamosa (Fr.) Quél. var *aurantiaca* Cke.
On soil. Kings Co. 11 Sept. 1931-K.A.H. (KM-507, 1736 *in* DAOM, fide A.H.S.).

***Stropharia epimyces** (Pk.) Atk. *in* Plant World 10(6):121. 1907.
Panaeolus epimyces Pk.
Parasitic on *Coprinus atramentarius* (Bull. ex Fr.) Fr. Kings Co. 11 Oct. 1979-K.A.H. (ACAD 13172, 14061, coll. B.J.M.).

Stropharia hornemannii (Fr. ex Fr.) Lundell & Nannf. *in* Fung. Exs. Suec., Praes. Upsal.:7. 1934.
Nematoloma hornemannii (Fr. ex Fr.) Sing. (1951).
Stropharia depilata (Pers. ex Fr.) Karst.
On rotten log. Kings Co. 8 Oct. 1932-K.A.H. (KM-504, 964, 1788, 4141 *in* DAOM, fide A.H.S., as *S. depilata*.)

Stropharia semiglobata (Batsch ex Fr.) Quél. *in* Champ. Jura et Vosges:143. 1872.
Stropharia stercoraria (Schum. ex Fr.) Quél.
On cow dung. Annapolis, Colchester, Halifax, Kings, Lunenburg and Pictou Co. 1908-A.H.M. (KM-506, 5414 *in* DAOM, K.A.H.) (L.E.W.-523).

Suillus acidus (Pk.) Sing. var. **acidus** *in* Farlowia 2:271. 1945.
Boletus acidus Pk.
Suillus hololeucus Pantidou.
Under conifers. Kings Co. 13 Oct. 1952-K.A.H. (KM-1605, 1743, 2965, 2966, 5328, *in* DAOM) (See Grund Harrison, Nova Scotian Boletes:179. 1976 for note on this species).

Suillus albidipes (Pk.) Sing. *in* Farlowia 2:45. 1945.
Boletus albidipes Pk.
Under *Pinus resinosa* Ait. (red pine). Kings Co. 1976-D.W.G., K.A.H. (ACAD 11171, 11211).

Suillus americanus (Pk.) Snell *in* Slipp & Snell, Lloydia 7:39. 1944.
Boletus americanus Pk.
Under *Pinus strobus* L. (white pine). Annapolis, Colchester, Kings and Pictou Co. 1908-A.H.M. (KM-738, 1686 *in* DAOM, K.A.H.) (ACAD 10393, 10406, D.W.G., K.A.H.) (L.E.W.-687).

Suillus brevipes (Pk.) Kuntze var. **brevipes** *in* Rev. Gen. Pl. 3:535. 1898.
Boletus brevipes Pk.
Under *Pinus banksiana* Lamb. (jack pine). Annapolis and Kings Co. 9 Oct. 1953-K.A.H. (KM-2407 *in* DAOM) (ACAD 11208, 11142, D.W.G., K.A.H.).

Suillus cavipes (Opat.) Smith & Thiers *in* Contrib. toward a Monogr. of North Am. Spec. of *Suillus*:30. 1964.
Boletus ampliporus Pk.
Boletinus cavipes (Opat.) Kalchbr.
In mixed woods near *Larix laricina* (DuRoi) K. Koch (larch). Annapolis, Halifax, Lunenburg, Pictou and Shelburne Co. 1881-J.S. (ACAD 10557, D.W.G., K.A.H.) (KM-2429, 3722, 3723, 5337, 5338 *in* DAOM, K.A.H.).

Suillus flavus (With. ex Fr. sensu Bres., Nüsch) Sing. *in* Farlowia 2:260. 1945.
Boletus flavus (With.) Fr. emend. Bres.
From Halifax and Pictou Co. 1881-J.S. (A.H.M.). A doubtful determination. European species, fide K.A.H.

Suillus granulatus (L. ex Fr.) Kuntze *in* Rev. Gen. Pl. 3(2):535. 1898.
Boletus granulatus Fr.
Boletus collinitus Fr.
In coniferous woods, usually near *Pinus* sp. (pine). Annapolis, Colchester, Kings and Pictou Co. 1908-A.H.M. (KM-561-563, 2019 *in* DAOM, K.A.H.) (ACAD 10394, D.W.G., K.A.H.) (L.E.W.-622.)

Suillus grevillei (Klotz.) Sing. *in* Farlowia 2:259. 1945.
Boletus elegans Fr.
Boletus grevillei Klotz.
Under *Larix laricina* (DuRoi) K. Koch (larch). Annapolis, Colchester and Kings Co. 1908-A.H.M. (KM-557, 1555, 3716 *in* DAOM, K.A.H.) (ACAD 10661, D.W.G., K.A.H.) (L.E.W.-847).

Suillus intermedius (Smith & Thiers) Smith & Thiers *in* Boletes of Mich.:56. 1971.
Suillus acidus (Pk.) Sing. var. *intermedius* Smith & Thiers.
Under *Pinus resinosa* Ait. (red pine). Kings Co. 1976-D.W.G., K.A.H. (ACAD 10426).

Suillus luteus (L. ex Fr.) S. F. Gray *in* Nat. Arr. Br. Pl. 1:646. 1821.
Boletus luteus (L.) Fr.
Ixocomus luteus (Fr.) Quél.
Under *Pinus* spp. (pine). Halifax, Kings, Lunenburg and Pictou Co. 1881-J.S. (KM-731, 3711 *in* DAOM, K.A.H.) (ACAD 10568, D.W.G., K.A.H.).

Suillus pictus (Pk.) Smith & Thiers *in* Contrib. toward a Monogr. of North Am. Spec. of *Suillus*:31. 1964.
Boletus pictus Pk.
Boletinus pictus (Pk.) Pk.
Under *Pinus strobus* L. (white pine). Colchester. Kings and Shelburne Co. 1908-A.H.M. (KM-551, 996 *in* DAOM, K.A.H.) (ACAD 10393, D.W.G., K.A.H.) (L.E.W.-694).

Suillus placidus (Bon.) Sing. *in* Farlowia 2:42. 1945.
Boletus albus Pk.
Boletus placidus Bon.
Under *Pinus strobus* L. (white pine). Kings Co. 11 Sept. 1938-K.A.H. (KM-736, 1912, 3784-3786 *in* DAOM) (ACAD 10419, D.W.G., K.A.H.).

Suillus proximus Smith & Thiers *in* Contrib. towards a Monogr. of North Am. Spec. of *Suillus*:42. 1964.
From Kings Co. 1974-D.W.G., K.A.H. (ACAD 11141, 11174, 11186) (Considered a syn. of *Suillus grevillei* (Klotzsch) Sing. *in* Grund & Harrison, Nova Scotian Boletes:166. 1976).

Suillus punctipes (Pk.) Sing. *in* Farlowia 2:277. 1945.
Boletus punctipes Pk.
Ixocomus punctipes (Pk.) Sing. (1942).
Under *Pinea* sp. (spruce). Halifax, Kings and Richmond Co. 1908-A.H.M. (ACAD 11162, D.W.G., K.A.H.) (KM-3000, 3781, 3783, 5359, *in* DAOM, K.A.H.).

Suillus subalutaceus (Smith & Thiers) Smith & Thiers *in* Boletes of Mich.:57. 1971.
Suillus acidus (Pk.) Sing. var. *subalutaceus* Smith & Thiers.
Under *Pinus resinosa* Ait. (red pine). Kings Co. 1976-D.W.G., K.A.H. (ACAD 10402).

Suillus subaureus (Pk.) Snell *in* Slipp & Snell, Lloydia 7:30. 1944.
Boletus subaureus Pk.

Ixocomus subaureus (Pk.) Sing. (1938).
In open mixed woods. Colchester and Kings Co. 1927-K.A.H. (KM-579, 580, 3010, 3011, 5364 *in* DAOM) (ACAD 10418, D.W.G., K.A.H.) (L.E.W.-573, 573a,b).

Suillus subluteus (Pk.) Snell *in* Slipp & Snell, Lloydia 7:34. 1944.
Boletus subluteus Pk.
Under *Pinus banksiana* Lamb. (jack pine). Halifax, Inverness, Kings and Lunenburg Co. 1908-A.H.M. (KM-581, 1804, 3748, 3749 *in* DAOM, K.A.H.) (ACAD 11495, D.W.G., K.A.H.).

Suillus tomentosus (Kauff.) Sing., Snell & Dick *in* Mycologia 51:570. 1959.
Boletus tomentosus Kauff.
Xerocomus lenticolor Snell & Dick (1960).
In mixed woods with *Pinus banksiana* Lamb. (jack pine). Richmond and Victoria Co. 12 Aug. 1954-K.A.H. (KM-3025-3027 *in* DAOM) (ACAD 11215, D.W.G., K.A.H.).

Suillus unicolor (Frost in Pk.) Kuntze *in* Rev. Gen. Pl. 3(2):536. 1898.
Boletus unicolor Frost (1889).
From Halifax Co. 1913-A.H.M. as *B. unicolor.*

Synchytrium aureum Schroet. *in* Hedwigia 9:4. 1870; Cohn, Beitr. Biol. Pflanz. 1:36. 1870.
On *Amelanchier* sp. (shad bush), *Ilex* sp. (holly), *Lysimachia terrestris* (L.) BSP. (yellow loosestrife), *Rubus hispidus* L. (trailing blackberry) and *Spiraea* sp. Queens Co. 2 Aug. 1938-R.J.B., J.F.H. (O-5863, 5864, 5865, 5968).

Synchytrium endobioticum (Schilb.) Perc. *in* Centralbl. Bakt. Parasitenkd. 11.25:440-447. 1910.
Wart disease of *Solanum tuberosum* L. (potato). Halifax and Lunenburg (Tancook Island) Co. 1 Oct. 1941-J.F.H. det H.T.G. (In garden plots and immediately eradicated).

Synchytrium vaccinii Thomas *in* Insect Life 1:279. 1889.
Red galls on *Amelanchier* sp. (shadbush), *Andromeda glaucophylla* Lk., *Aronia arbutifolia* (L.) Ell. (chokeberry), *Chamaedaphne calyculata* (L.) Moench var. *augustifolia* (Ait.) Rehd. (leather leaf), *Illex* sp. (holly), *Kalmia angustifolia* L. (lambkill), *Ledum groenlandicum* Oeder (Labrador tea), *Myrica gale* L. (sweet gale), *Rhododendron canadense* (L.) Torr. (rhodora), *Rubus hispidus* L. (trailing blackberry), *Spiraea* sp. and *Vaccinium macrocarpon* Ait. (cranberry). General. 7 July 1933-K.A.H., W.S.B., J.W.M. (O-3061, 5956).

Syzygites megalocarpus Ehrenb. ex Fr. *in* Syst. Mycol. 3:329. 1832.
Sporodinia grandis Link.
On *Amanita flavoconia* Atk., *Inocybe* sp. and *Leccinum scabrum* (Fr.) S.F. Gray. General. 1908-A.H.M. (L.E.W. 15 July 1929). Common in Nova Scotia, fide K.A.H.

Taeniolella stilbospora (Cda.) Hughes *in* Can. J. Bot. 36:817. 1958.
Hormiscium stilbosporum (Cda.) Sacc.
Septonema atrum Sacc.
On twigs of *Salix* sp. (willow). Colchester Co. July 1931-L.E.W. (W-473).

***Talaromyces helicus** Benjamin *in* Mycologia 47:684. 1955, var. **major** Stolk & Samson *in* Stud. Mycol. 2:19-21. 1972.
Stat. conid. *Penicillium helicum* Raper & Fennell pro parte.
On sedge material from salt marsh. Kings Co. 13 March 1979-C.O.G., J.B. (DAOM 173137 coll. G.J.B.) (IMI 238773 as *T. helicus* fide A.H.S.O.).

Talaromyces luteus (Zukal) Benjamin *in* Mycologia 47:681. 1955.
See stat. conid. *Penicillium luteum* Zukal.

Tapesia fusca (Pers. ex Fr.) Fckl. *in* Symb. Mycol.:302. 1869.
On decayed *Betula* sp. (birch). Colchester Co. 3 July 1931-L.E.W. (W-364, leg. A.H.S., det. E.K.C.).

Tapesia melaleucoides Rehm *in* Rabenhorst, Kryptogamenfl. 4:578. 1889.
On decorticated hardwood. Colchester Co. 5 July 1935-L.E.W. (W-1725).

Taphrina caerulescens (Desm.) Tul. *in* Ann. Sci. Nat. Bot., Sér. 5, 5:127. 1866.
On *Quercus rubra* L. (red oak) and *Quercus* sp. Pictou Co. 22 July 1931-L.E.W. (W-1113).

****Taphrina carnea** Johanson *in* Öfvers K. Sven. Akad. Forh. 1885:43. 1886.
On *Betula lutea* Michx. (yellow birch). Kings Co. 11 June 1975-K.A.H., C.O.G. (DAOM 151290).

Taphrina communis (Sadeb.) Gies. *in* Flora 81:267-361. 1895.
On *Prunus domestica* L. (common plum), *P. salicina* Lindl. (Japanese plum) and *Prunus* sp. (wild plum). General. 9 July 1925-J.F.H. det. A.J.M. (L.E.W.-15, leg. A.R.P.).

Taphrina confusa (Atk.) Gies. *in* Flora 81:267-361. 1895.
On *Prunus virginiana* L. (chokecherry). Hants, Kings and Pictou Co. 23 July 1936-J.F.H. det. A.J.M. (O-2636, 5459).

Taphrina dearnessii Jenkins *in* J. Wash. Acad. Sci. 29:222-230. 1939.
On *Acer rubrum* L. (red maple). 1953. (For. Insect Dis. Surv.:26. 1953((Kings Co. 15 June 1976-C.O.G.).

Taphrina deformans (Berk.) Tul. *in* Ann. Sci. Nat. Bot., Sér. 5, 5:128. 1866.
On *Prunus persica* (L.) Batsch (peach). Annapolis, Digby, Hants and Kings Co. 25 June 1925-J.F.H.

Taphrina flava Farl. *in* Proc. Am. Acad. Arts Sci. 18:84. 1883.
On *Betula papyrifera* Marsh. (white birch) and *B. populifolia* Marsh. (wire birch). Kings Co. 9 July 1933-R.W.W. det. I.L.C.

Taphrina flavorubra Ray *in* Mycologia 31:72. 1939.
On *Prunus besseyi* Bailey (sand cherry). Shelburne Co. 10 July 1952-D.W.C. coll. D.A.H.

****Taphrina fusca** Gies. *in* Flora 86:100-109. 1899.
On *Dryopteris spinulosa* (Muell.) Watt (wood fern). Victoria Co. 19 July 1956-J.S.E., D.W.C.

****Taphrina johansonii** Sadeb. *in* Jahrb. Hamb. Wiss. Anst. 8:67. 1890.
Causing golden yellow enlargements of carpels on catkins of *Populus grandidentata* Michx. (large-toothed aspen). Kings Co. 11 June 1975-C.O.G. (DAOM 151292).

Taphrina letifera (Pk.) Sacc. *in* Syll. Fung. 10:67. 1892.
On *Acer pensylvanicum* L. (striped maple). 1956. (For. Insect Dis. Surv.:26. 1956).

Taphrina polystichi Mix *in* Mycologia 30:563-579. 1938.
On *Polystichum acrostichoides* (Michx.) Schott (Christmas fern). 1938-A.J.M.

Taphrina populina Fr. *in* Syst. Mycol. 3:520. 1832.
On *Populus nigra* L. var. *italica* Muench. (Lombardy poplar). Antigonish Co. 10 Aug. 1956-D.W.C.

Taphrina pruni Tul. *in* Ann. Sci. Nat. Bot., Sér. 5, 5:129. 1866.
On *Prunus domestica* L. (common plum), Annapolis, Digby, Hants and Kings Co. 9 July 1925-J.F.H. (Early reports probably misidentification of *T. communis*).

****Taphrina rhizophora** Johanson *in* Bih. K. Sven. Vetensk. Akad. Handl. 13:18. 1887.
Causing golden yellow enlargements of carpels on catkins of *Populus alba* L. (white poplar). Kings Co. 11 June 1975-C.O.G., K.A.H., J.B. (DAOM 151291 coll. Jill Bleakney).

Taphrina robinsoniana Gies. *in* Flora 81:342. 1895.
On *Alnus rugosa* (DuRoi) Spreng. (speckled alder) and *A. rugosa* var. *americana* (Regel) Fern. General. 1913-A.H.M. (O-4309, 4527).

Taphrina tosquinetii (Westend.) Tul. *in* Ann. Sci. Nat. Bot., Sér. 5, 5:122-136. 1866.
On *Alnus crispa* (Ait.) Pursh var. *mollis* Fern. (downy alder). Halifax and Inverness Co. Aug. 1956-D.B.O.S.

Taphrina wiesneri (Rathay) Mix *in* Trans. Kans. Acad. Sci. 57:64. 1954.
On *Prunus pensylvanica* L.f. (pin cherry) and *Prunus* sp. Antigonish and Kings Co. 7 July 1926-K.A.H. det. A.J.M. (O-3613).

Thanatephorus cucumeris (Frank) Donk *in* Reinwardtia 3:376. 1956.
Pellicularia filamentosa (Pat.) Rogers.
Sclerotial state: *Rhizoctonia solani* Kühn.
On *Beta vulgaris* L. (beet), *Brassica napobrassica* (L.) Mill. (rutabaga), *Daucus carota* L. var. *sativa* DC. (carrot), *Malus pumila* Mill. (apple) and *Solanum tuberosum* L. (potato). General and on many other hosts. 1925-J.F.H.

Thelephora anthocephala Fr. *in* Epicr. Syst. Mycol.:535. 1838, var. **clavularis** Quél. *in* Elench. Fung.:203. 1886.
On moss and duff. Colchester Co. 22 Aug. 1931-L.E.W. (W-1389 det. M.A.D.).

Thelephora multipartita Schw. *in* Fries, Epicr. Syst. Mycol.:536. 1838.
Thelephora regularis Schw. var. *multipartita* (Schw.) Corner.
Under hardwoods. Colchester Co. 21 Aug. 1931-L.E.W. (W-1382 fide M.A.D.) (KM-2800, 2801 *in* DAOM, K.A.H.).

Thelephora palmata (Scop.) Fr. *in* Epicr. Syst. Mycol.:432. 1838.
Under conifers. Cape Breton, Colchester, Hants and Kings Co. Summer of 1927-K.A.H. (KM-132, 132a-c, 2787-2792, 4349, 4350 *in* DAOM) (L.E.W.-1047) (O-F5465).

Thelephora papillosa Fr. *in* Elench. Fung.:212. 1828.
Grandinia papillosa Fr.
Hypodontia papillosa (Fr.) J. Erikss. (1958).
Odontia papillosa (Fr.) Bres.
On *Fagus grandifolia* Ehrh. (beech). Colchester Co. 11 July 1931-L.E.W., K.C. (W-492, 1162 det. K.C.).

***Thelephora regularis** Schw. *in* Syn. Fung. Carol. 999. 1822.
From Kings Co. 30 Sept. 1953-K.A.H. (KM-2799 *in* DAOM conf. Joan Hanson).

Thelephora terrestris Ehr. ex Fr. *in* Syst. Mycol. 1:431. 1821.
Under conifers. Colchester, Halifax, Kings and Pictou Co. 1908-A.H.M. (KM-97a-c, 97, 148a-c, 2793-2798, 5187 *in* DAOM, K.A.H.) (L.E.W.-23, 275, 1185, 1195, 1294, 1295, 1301).

Thielaviopsis basicola (Berk. & Br.) Ferr. *in* Flora Ital. Crypt. 1(4):233. 1912.
On *Kalanchöe* sp., *Lathyrus odoratus* L. (sweet pea), *Lupinus albus* L. (white lupine), *L. angustifolius* L. (lupine) and *Nicotiana* sp. (tobacco). Digby and Kings Co. 9 July 1929-J.F.H.

Thuemenidium atropurpureum (Batsch ex Fr.) Kunze *in* Rev. Gen. Pl. 2:873. 1891.
See *Microglossum atropurpureum* (Batsch ex Fr.) Karst.

Thyronectria balsamea (Cke. & Pk.) Seeler *in* J. Arnold Arbor. 21:422. 1940.
Scoleconectria balsamea (Cke. & Pk.) Seav.
On *Abies balsamea* (L.) Mill. (balsam fir). Colchester Co. 25 July 1931-L.E.W. (W-1147, 1148).

Thysanophora penicillioides (Roum.) Kendrick *in* Can. J. Bot. 39:820. 1961.
On *Abies balsamea* (L.) Mill. (balsam fir), *A. grandis* Lindl. (giant fir), *Fragaria* sp. (cultivated strawberry), *Picea rubens* Sarg. (red spruce) and *Vaccinium macrocarpon* Ait. (cranberry). Inverness and Kings Co. 10 May 1965-C.O.G. (DAOM 153471, 153472).

Tilletia decipiens (Pers.) Körn. *in* Hedwigia 16:30. 1877.
On *Agrostis tenuis* Sibth. (bent grass, brown top). 1951-I.L.C.

Tilletia foetida (Wallr.) Liro *in* Suomen Maanviljelys-Taloudellinen Koelaitos (Agrikultur-Ekonomiska Försöksanstalten i Finland), Helsingfors, 1915-1916, p. 27, 1920.
Tilletia laevis Kühn.
On *Triticum aestivum* L. (wheat). Colchester Co. 17 Sept. 1926-J.F.H.

Tilletia holci (Westend.) Schroet. *in* Beitr. Biol. Pflanz. 2:365. 1877.
Tilletia anthoxanthi Blytt.
On *Anthoxanthum odoratum* L. (sweet vernal grass). 1939-G.L.I.Z.

Tolypocladium parasiticum Barron *in* Can. J. Bot. 58:439-442. 1980.
Species found in old bird droppings. Kings Co. 1979-G.L.B.

Tolypocladium trigonosporum Barron *in* Can. J. Bot. 59:1452. 1981.
Parasitic on bdelloid rotifers in rotting wood stump in mixed woods. Kings Co. 31 Oct. 1979-G.L.B. coll. M.E.A.

Tolyposporium bullatum (Schroet.) Schroet. *in* Cohn, Krypt. Fl. Schles. 3:276. 1887.
On *Echinochloa crusgalli* (L.) Beauv. (barnyard-grass). Kings Co. 30 Sept. 1927-K.A.H. det. I.H.C. (no. 791).

Tomentella atrorubra (Pk.) Bourd. & Galz. *in* Hymén. Fr.:480. 1928.
On *Abies balsamea* (L.) Mill. (balsam fir). 1975-L.P.M., J.M.M.

Tomentella botryoides (Schw.) Bourd. & Galz. *in* Bull. Soc. Mycol. Fr. 40:59. 1924.
Thelephora botryoides Schw.
Tomentella glandulifera Höhn. & Litsch.
On decayed *Salix* sp. (willow). Colchester Co. 1950-L.E.W. (W-1786).

Tomentella cervina (Burt) Bourd. & Galz. *in* Bull. Soc. Mycol. Fr. 40:146. 1924.
Hypochnus cervinus Burt.
On *Poria* sp. Colchester Co. 24 Aug. 1931-L.E.W. (W-1404 det. V.L.).

Tomentella fumosa (Fr.) Pilát *in* Bull. Soc. Mycol. Fr. 51:409. (1935) 1936.
Corticium fumosum Fr.
On decayed wood. Colchester Co. 3 July 1931-L.E.W. (W-368, 1100, 1146, 1252).

Tomentella fusca (Pers. ex Fr.) Schroet. *in* Jahresber. Schles. Ges. 65:271. 1887.
Hypochnus fusca (Pers. ex Fr.) Karst.
On *Betula* sp. (birch). Colchester Co. 30 Aug. 1933-L.E.W. (W-1643 det. V.L.).

Tomentella hoehnelii Skovsted *in* C.R. Trav. Lab. Carlsberg 25:29. 1950.
Hypochnus subfusca Karst.
Tomentella subfusca Höhn. & Litsch.
On *Fagus grandifolia* Ehrh. (beech). Colchester Co. 11 Aug. 1931-L.E.W. (W-1271 det. V.L.).

Tomentella olivascens (Berk. & Curt.) Bourd. & Galz. *in* Hymén. Fr.:477. 1928.
Zygodesmus olivascens Berk. & Curt.
On decayed wood. Colchester Co. 24 Aug. 1931-L.E.W. (W-1402).

Tomentella punicea (Alb. & Schw. ex Fr.) Schroet. *in* Cohn, Krypt. Fl. Schles.:420. 1889.
On coniferous wood. Colchester Co. 6 Aug. 1935-L.E.W. (W-1766 det. H.S.J.).

***Tomentella rubiginosa** (Pk.) Maire *in* Ann. Mycol. 4:329-335. 1906.
Hypochnus rubiginosus Bres.
Zygodesmus rubiginosus Pk.
On soil in wooded ravine. Kings Co. 16 Oct. 1953-K.A.H. (KM-2810 *in* DAOM, det. Joan Hanson).

Tomentella spongiosa (Schw.) Höhn. & Litsch. *in* Oesterr. Bot. Z.:5. 1908.
Hypochnus obscuratus Karst.

Hypochnus spiniferus Burt.
Hypochnus spongiosus (Schw.) Burt.
On *Acer rubrum* L. (red maple). 1975-L.P.M., J.M.M.

Tomentella testacea Bourd. & Galz. *in* Hymén. Fr.:493. 1928.
Hypochnus testaceus (Bourd. & Galz.) Wehm.
On *Polyporus versicolor* L. ex Fr. Colchester Co. 24 Aug. 1931-L.E.W. (W-1398 det. V.L.).

Tomentella tristis (Karst.) Höhn. & Litsch. *in* Sitzungsber. K. Akad. Wiss., Math.-Naturwiss. Kl. 114:1572. 1906.
Tomentella umbina (Fr.) Donk.
Tomentellastrum umbrinum (Fr.) Svrček.
On *Poria* sp. Colchester Co. 11 Aug. 1931-L.E.W. (W-1269, 1401 det. V.L.).

Toxosporium camptospermum Maubl. *in* Bull. Soc. Mycol. Fr. 23:172. 1907.
Coryneum bicorne Rostr.
Toxosporium abietinum Vuill.
On needles of *Abies balsamea* (L.) Mill. (balsam fir). Kings Co. 20 Aug. 1926-A.R.G. (6th Annu. Rep. Prevalence Plant Dis. Can.:30. 1926).

Trametes americana Overh. *in* Pa. Agric. Exp. Stn. Tech. Bull. 316:15. 1935.
See *Gloeophyllum protractum* (Fr.) Imaz.

Trametes heteromorpha (Fr.) Bres. *in* Bull. Wis. Geol. Nat. Hist. Surv. 33:40. 1914.
See *Antrodia heteromorpha* (Fr. per Fr.) Donk.

Trametes hispida Bagl. *in* Erbar. Critt. Ital. 1356. 1866.
See *Funalia gallica* (Fr.) Bond. & Sing.

Trametes mollis (Sommerf.) Fr. *in* Hymén. Eur.:585. 1874.
See *Datronia mollis* (Sommerf.) Fr.

Trametes serialis Fr. *in* Hymén. Eur.:585. 1874.
See *Antrodia serialis* (Fr.) Donk.

Trametes subroseus (Weir) Overh. *in* Pa. Agric. Exp. Stn. Tech. Bull. 316:11. 1935.
See *Fomitopsis cajanderi* (Karst.) Kotl. & Pouz.

Trametes trogii Berk. *in* Trog, Schweiz Schwämme, suppl. 2:52. 1850.
See *Funalia trogii* (Berk. apud Trog) Bond. & Sing.

Trametes variiformis (Pk.) Pk. *in* Annu. Rep. N.Y. State Mus. 54:170. 1901.
See *Coriolellus variiformis* (Pk.) Sarkar.

Tranzschelia thalictri (Chev.) Diet. *in* Ann. Mycol. 20:31. 1922.
On *Thalictrum polygamum* Muhl. (meadow-rue) and *T. polygamum* var. *hebecarpum* Fern. 1913-W.P.F. (O-4968).

Trechiospora brinkmanni (Bres.) Rogers & Jacks. *in* Farlowia 1:288. 1943.
Sistotrema brinkmanni (Bres.) Erikss.
Stat. conid. *Phymatotrichum omnivorum* (Shear) Duggar (Mycologia 61:1054. 1969).
On *Betula lutea* Michx. f. (yellow birch), *Picea* sp. (spruce) and from peat soil, *Sphagnum* sp. Colchester Co. 26 Aug. 1935-L.E.W. (W-1802 det. H.S.J.) (KM-3076 *in* DAOM, K.A.H.).

Trematosphaeria callicarpa Sacc. *in* Syll. Fung. 2:116. 1883.
On decayed wood. Colchester Co. 21 June 1926-L.E.W. (P380).

Trematosphaeria faginea Morg. *in* J. Mycol.:161. 1904.
On bark of *Fagus grandifolia* Ehrh. (beech). Colchester Co. 7 Sept. 1931-L.E.W. (W-1480, 1564).

Trematosphaeria melina (Berk. & Br.) Sacc. *in* Michelia 1:345. 1878.
On *Fagus grandifolia* Ehrh. (beech). 1975-L.P.M., J.M.M.

Tremella atrovirens (Fr.) Sacc. *in* Syll. Fung. 6:790. 1888.
On old sphaeriaceous stromata on *Salix* sp. Colchester Co. 16 July 1931-L.E.W. (W-1059).

Tremella encephala Pers. *in* Mycol. Eur. 1:98. 1822.
Naematelia encephala (Willd.) Fr. (1822).
On *Abies balsamea* (L.) Mill. (balsam fir) and *Pinus* sp. (pine). Colchester and Kings Co. 6 April 1928-K.A.H. (KM-2113-2115, 5153, 5273 *in* DAOM) (L.E.W.-1332).

Tremella foliacea Pers. ex Fr. *in* Syst. Mycol. 2:212. 1822.
On *Abies balsamea* (L.) Mill. (balsam fir). Colchester and Richmond Co. 3 Aug. 1931-L.E.W. (W-1233, 1233a).

Tremella lutescens (Pers.) Fr. *in* Syst. Mycol. 2:213. 1822.
On *Acer* sp. (maple), *Fagus* sp. (beech) and *Cornus alternifolia* L.f. (alternate-leaved dogwood). Colchester, Lunenburg and Pictou Co. 1908-A.H.M. (L.E.W.-117, 1057).

Tremella mesenterica Fr. *in* Syst. Mycol. 2:214. 1822.
On *Acer spicatum* Lam. (mountain maple). 1975-L.P.M., J.M.M.

Tremella mycetophila Pk. *in* Annu. Rep. N.Y. State Mus. 28:53. 1876.
On *Collybia dryophila* Fr. Colchester Co. 15 Aug. 1931-L.E.W. (W-1309).

Tremellodendron candidum (Schw.) Atk. *in* J. Mycol. 8:106. 1902.
On soil. Colchester Co. 11 Aug. 1927-L.E.W. (W-11, 1500, 1501).

Tremellodendron merismatoides (Schw.) Burt *in* Ann. Mo. Bot. Gard. 2:740. 1915.
On soil. Colchester Co. 24 Aug. 1931-L.E.W. (W-1502).

Tremellodendron pallidum (Schw.) Burt *in* Ann. Mo. Bot. Gard. 2:734. 1915.
Thelephora sweinitzii Pk.
Tremellodendron sweinitzii (Pk.) Atk.
On soil. Colchester, Halifax, Hants and Kings Co. 15 Aug. 1931-L.E.W. (W-1320) (O-F7130) (KM-4182 *in* DAOM, K.A.H.).

Tremiscus helvelloides (DC. ex Pers.) Donk *in* Taxon 7:164. 1958.
Gyrocephalus rufus (Jacq.) Bref.
Phlogiotis helvelloides (Fr.) Mart.
On decayed wood and soil. Colchester Co. 18 July 1931-L.E.W. (W-1077 coll. A.H.S., 1077a).

Trichia contorta (Ditm.) Rostaf. *in* Monogr. Mycetozoa:259. 1875.
Trichia inconspicua Rostaf.
On dead wood and bark of *Fagus* sp. (beech). Pictou Co. 1913-C.L.M.

Trichia decipiens (Pers.) Macbr. *in* North Am. Slime-Moulds 218. 1899.
On dead wood. Pictou Co. 1906-C.L.M.

Trichia favoginea (Batsch) Pers. *in* Neues Mag. Bot. 1:90. 1794.
Trichia persimilis Karst.
On decayed wood. Halifax Co. 30 July 1931-L.E.W. (W-1190).

Trichia varia (Pers.) *in* Neues Mag. Bot. 1:90. 1794.
On *Populus grandidentata* Michx. (large-toothed aspen). Pictou Co. 1906-C.L.M.

Trichocladium asperum Harz *in* Bull. Soc. Imp. Nat. Moscou. 44:125-127. 1871.
From crown of *Fragaria* sp. (cultivated strawberry) and from tuber of *Solanum tuberosum* L. (potato). Kings Co. 21 Apr. 1964-C.O.G.

Trichocladium opacum (Cda.) Hughes *in* Trans. Br. Mycol. Soc. 35:154-157. 1952.
From crown of *Fragaria* sp. (cultivated strawberry). Kings Co. Jan. 1968-C.O.G. conf. S.J.H.

Trichoderma hamatum (Bonn.) Bain. *in* Bull. Trimest. Soc. Mycol. Fr. 22:131. 1906.
From soil. Cumberland Co. 1980-D.B., A.T.

Trichoderma harzianum Rifai *in* Commonw. Mycol. Inst. Mycol. Pap. 116:38. 1969.
From soil. Cumberland Co. 1980-D.B., A.T.

Trichoderma koningii Oud. apud Oud. & Koning *in* Arch. Neerl. Sci. Exact. Nat. 2(7):291. 1902.
From roots of *Malus pumila* Mill. (apple) and from milled peat, *Sphagnum* sp. Annapolis and Kings Co. July 1932-R.W.W.

Trichoderma polysporum (Link ex Pers.) Rifai *in* Commonw. Mycol. Inst. Mycol. Pap. 116:18. 1969.
From soil. Cumberland Co. 1980-D.B., A.T.

* **Trichoderma viride** Pers. *in* Syn. Fung.:231. 1801.
Trichoderma lignorum (Tode) Harz.
See stat. perf. *Hypocrea rufa* (Pers.) Fr.
From soil and from milled peat, *Sphagnum* sp. Kings Co. 1961-C.O.G.

Trichoglossum farlowii (Cke.) Durand *in* Ann. Mycol. 6:438. 1908.
On soil. Annapolis, Cumberland and Kings Co. 29 Aug. 1931-L.E.W. leg. A.H.S. (1435) (KM-1029, 1061, 1062 *in* DAOM, K.A.H.) (ACAD 1029a,b,c, K.A.H.).

Trichoglossum hirsutum (Pers. ex Fr.) Boud. var. **hirsutum** *in* Bull. Soc. Mycol. Fr. 1:110. 1885.
On soil. General. 2 Aug. 1931-K.A.H. (KM-1030, 1067 *in* DAOM) (L.E.W.-1437 leg. A.H.S.) (ACAD 1030a,b,c).

Trichoglossum velutipes (Pk.) Durand *in* Ann. Mycol. 6:434. 1908.
On soil, humus or rotten wood. Annapolis, Colchester and Kings Co. 21 Aug. 1931-L.E.W. (W-1380) (KM-1031, 1064, 1066 *in* DAOM, K.A.H.) (ACAD 1031b, c,d, K.A.H.).

Trichoglossum walteri (Berk.) Durand *in* Ann. Mycol. 6:440. 1908.
On soil in woods. Kings Co. 4 Sept. 1938-K.A.H. (KM-1063, 1063a *in* DAOM) (ACAD 1032a,b,c).

Tricholoma albobrunneum (Pers. ex Fr.) Staude *in* Schwämme Mitteldtsch.:129. 1858.
Tricholoma striatum (Quél.) Sacc.
From Annapolis and Kings Co. 1913-A.H.M. (KM-4016 *in* DAOM, K.A.H.).

Tricholoma aurantium (Schaeff. ex Fr.) Ricken *in* Die Blätterpilze:332. 1915.
Armillaria aurantia (Schaeff. ex Fr.) Kummer.
From Kings Co. 11 Sept. 1931-K.A.H. (KM-508 *in* DAOM).

* **Tricholoma colossus** (Fr.) Quél. *in* Champ. Jura et Vosges:76. 1872.
Armillaria colossa (Fr.) Boud.
From Richmond Co. 2 Sept. 1957-K.A.H. (KM-4017 *in* DAOM).

Tricholoma columbetta (Fr.) Staude *in* Schwämme Mitteldtsch.:128. 1858.
Under *Picea* sp. (spruce). Halifax, Kings and Lunenburg Co. 1880-J.S. (KM-509 *in* DAOM, K.A.H.).

Tricholoma flavovirens (Fr.) Lundell *in* Fung. Exs. Suec., fasc. 23, 1102:1. 1942.
Tricholoma equestre (L. ex Fr.) Kummer.
Under conifers. Halifax, Kings and Lunenburg Co. 1886-J.S. (KM-510, 511, 953, 5321 *in* DAOM, K.A.H.).

* **Tricholoma focale** (Fr.) Ricken *in* Die Blätterpilze:332. 1915.
Agaricus focalis Fr.
From Kings Co. 4 Oct. 1957-K.A.H. (KM-4018 *in* DAOM).

Tricholoma fulvum (Bull. ex Fr.) Sacc. *in* Flora Ital. Crypt. 1(14):117. 1915.
Tricholoma flavobrunneus (Fr. ex Pers.) Kummer.
Tricholoma nictitans (Fr.) Gill.
Tricholoma transmutans (Pk.) Sacc.
From Annapolis, Kings and Shelburne Co. 1908-A.H.M. (KM-920, 2750, 5137 *in* DAOM, K.A.H.) (DAOM 112162, K.A.H.).

Tricholoma imbricatum (Fr. ex Fr.) Kummer *in* Führ. in Pilzkd.:133. 1871.
From Lunenburg Co. 1913-A.H.M.

Tricholoma impolitum (Lasch) Gill. *in* Hymén. Fr. fasc. suppl.:101. 1878.
In mixed woods. Colchester Co. 7 Sept. 1931-A.H.S., L.E.W. (W-894).

Tricholoma naucoria (Murr.) Pilát *in* Agar. Eur. Clavis Dichot.:155. 1951.
Under conifers. Colchester Co. 14 July 1931-A.H.S., L.E.W. (W-627).

Tricholoma portentosum (Fr.) Quél. *in* Champ. Jura et Vosges:338. 1873.
Under conifers. Kings Co. 8 Oct. 1931-K.A.H. (KM-513, 2745, 2746 *in* DAOM, fide A.H.S.).

Tricholoma resplendens (Fr.) Karst. *in* Hattsvampar 1:32. 1879.
In mixed woods. Colchester Co. 2 Sept. 1931-A.H.S., L.E.W. (W-858).

Tricholoma robustum (Alb. & Schw. ex Fr.) Ricken *in* Die Blätterpilze:332. 1915.
Armillaria robusta (Alb. & Schw. ex Fr.) Kummer.
From Annapolis Co. 1913-A.H.M. (as *A. robusta*).

Tricholoma saponaceum (Fr.) Staude *in* Schwämme Mitteldtsch.:127. 1858.
Under *Picea* sp. (spruce). Antigonish, Colchester and Kings Co. 11 July 1931-A.H.S., L.E.W. (W-607) (KM-515, 4022 *in* DAOM, K.A.H.).

Tricholoma sejunctum (Sow. ex Fr.) Quél. *in* Champ. Jura et Vosges:75. 1872.
Agaricus sejunctus Fr.
In mixed woods. Halifax, Kings and Lunenburg Co. and on Cape Breton Island. 1881-J.S. (KM-516, 542, 956, 957, 4021, 4024 *in* DAOM, K.A.H.).

*****Tricholoma subacutum** Pk. *in* Annu. Rep. N.Y. State Mus. 42:16. 1889.
(a syn. of *Tricholoma virgatum* (Fr. ex Fr.) Kummer, fide C. Ovrebo).
From Kings Co. 11 Oct. 1952-K.A.H. (KM-1610, 2749, 4023 *in* DAOM).

Tricholoma terreum (Schaeff. ex Fr.) Staude *in* Schwämme Mitteldtsch.:127. 1858.
Under conifers. Colchester and Kings Co. 4 Sept. 1931-A.H.S., L.E.W. (W-880) (KM-919, 5327 *in* DAOM, K.A.H.).

Tricholoma vaccinum (Pers. ex Fr.) Staude *in* Schwämme Mitteldtsch.:128. 1858.
Under conifers. Colchester and Kings Co. 4 Sept. 1931-A.H.S., L.E.W. (W-878) (KM-517, 518, 2755-2758, 5323 *in* DAOM, K.A.H.).

Tricholoma virgatum (Fr. ex Fr.) Kummer *in* Führ. in Pilzkd.:134. 1871.
Tricholoma subacutum Pk.
Under conifers. Annapolis, Colchester and Kings Co. 1913-A.H.M. (L.E.W.-879) (KM-2055, 5324 *in* DAOM, K.A.H.).

Tricholomopsis decora (Fr.) Sing. *in* Schweiz. Z. Pilzkd. 17:56. 1939.
Clitocybe decora Fr.
Tricholoma decora (Fr.) Quél.
On rotten logs and in conifer woods. Colchester, Hants and Kings Co. 13 Aug. 1930-K.A.H. (KM-195, 547 *in* DAOM) (ACAD 195, conf. H.E.B.) (L.E.W.-681).

Tricholomopsis platyphylla (Pers. ex Fr.) Sing. *in* Schweiz. Z. Pilzkd. 17:56. 1939.
Agaricus platyphylla Pers. ex Fr.
Collybia platyphylla (Fr.) Kummer.
On old logs and about old stumps. Halifax, Kings and Lunenburg Co. 1908-A.H.M. (KM-240, 241, 768, 4152 *in* DAOM, K.A.H.) (L.E.W.-95).

Tricholomopsis rutilans (Schaeff. ex Fr.) Sing. *in* Schweiz. Z. Pilzkd. 17:56. 1939.
Tricholoma rutilans (Fr.) Quél.
On coniferous wood and stumps. Colchester, Guysborough, Halifax, Kings, Pictou and Shelburne Co. 1908-A.H.M. (KM-514, 538, 954, 958, 4019, 4020 *in* DAOM, K.A.H.) (L.E.W.-564).

Trichophaea gregaria (Rehm) Boud. *in* Hist. Class. Discom. Eur. 60. 1907.
Lachnea gregaria Phill.
From Kings Co. 30 Aug. 1936-K.A.H. (KM-1119 *in* DAOM).

Trichothecium roseum (Pers.) Link *in* Mag. Ges. Naturforsch. Freunde, Berl. 3:18. 1809.

Cephalothecium roseum Cda.

Causing defoliation of *Cucumis sativus* L. (cucumber) in greenhouse, on *Daphne mezereum* L. (February daphne) following *Botrytis cinerea* blight, and causing storage rot of *Malus pumila* Mill. (apple). Kings Co. 27 July 1937-J.F.H.

***Tripterospora brevicaudata** Cain *in* Can. J. Bot. 34:700. 1956.

From petiole of *Fragaria* sp. (cultivated strawberry). Kings Co. 19 Sept. 1963-C.O.G., R.F.C.

Truncatella angustata (Pers. ex Lk.) Hughes *in* Can. J. Bot. 36:822. 1958.

Pestalotia truncata Lév.

Truncatella truncata (Lév.) Stey.

From crown of *Fragaria* sp. (cultivated strawberry) and fruit of *Vaccinium macrocarpon* Ait. (cranberry). Kings Co. 11 Dec. 1964-C.O.G., K.A.H., S.J.H.

***Tryblidiopsis pinastri** (Pers. ex Fr.) Karst. *in* Bidr. Finl. Nat. Folk 19 (Mycol. Fenn. 1):262. 1871.

Tympanis pinastri (Pers. ex Fr.) Tul.

On wood of *Picea glauca* (Moench) Voss (white spruce). Kings Co. 6 June 1952-D.W.C., J.W.G.

Tubercularia ulmea Carter *in* Phytopathology 37:243-246. 1947.

On *Ulmus pumila* L. (Siberian elm). Cape Breton and Colchester Co. 1951-J.F.H., I.L.C.

***Tuberculina persicina** (Ditm.) Sacc. *in* Fung. Ital. Del., tab. 964. 1881.

On leaves of *Oenothera perennis* L. (sun-drops). Kings Co. 27 Sept. 1951-D.W.C. (a parasite of rust fungi, probably *Uromyces plumbarius* Pk. on this host, C.O.G.).

Tubifera ferruginosa (Batsch) Gmel. *in* Syst. Nat. 2:1472. 1791.

On decayed logs and on *Tsuga* sp. (hemlock). Colchester and Pictou Co. 1906-C.L.M. (L.E.W.-410, 1340, 1407).

Tulasnella violacea (Johan-Olsen) Juel *in* Bih. Sven. Vetensk. Akad. Handl. 23:22. 1897.

On *Abies balsamea* (L.) Mill. (balsam fir). 1975-L.P.M., J.M.M.

Tulasnella violea (Quél) Bourd. & Galz. *in* Bull. Soc. Mycol. Fr. 25:31. 1909.

On *Alnus* sp. (alder), *Betula* sp. (birch) and *Populus* sp. (popular). Colchester and Lunenburg Co. 5 Sept. 1935-L.E.W. (W-1809) (KM-2840, 5275 det. G.W.M. *in* DAOM, K.A.H.).

Tylopilus chromapes (Frost) Smith & Thiers *in* Boletes of Mich.:92. 1971.

Boletus chromapes Frost.

Leccinum chromapes (Frost) Sing.

In coniferous woods. Annapolis, Colchester, Halifax, Kings, Lunenburg, Pictou and Victoria Co. 1908-A.H.M. (KM-553, 554, 1919, 3710, 5339 in DAOM, K.A.H.) (L.E.W.-538) (ACAD 10287, D.W.G., K.A.H.).

Tylopilus eximius (Pk.) Sing. *in* Am. Midl. Nat. 37:109. 1947.

Boletus eximius Pk.

In conifer forests. Colchester, Halifax and Kings Co. 1913-A.H.M. (KM-558, 1731, 2979, 2980, 5342 *in* DAOM, K.A.H.) (ACAD 10467, 10270, D.W.G., K.A.H.) (L.E.W.-574).

Tylopilus felleus (Fr.) Karst. var. **felleus** *in* Rev. Mycol. 3:16. 1881.

Boletus felleus Fr.

On ground or very rotten wood. Annapolis, Colchester, Kings and Pictou Co. 1908-A.H.M. (KM-559, 560, 595, 596, 726, 734, 5343 *in* DAOM, K.A.H.) (ACAD 10321 D.W.G., K.A.H.) (L.E.W.-626, 626a,b).

Tylopilus fumosipes (Pk.) Smith & Thiers *in* Boletes of Mich.:103. 1971.

Porphyrellus porphyrosporus (Fr.) Gilbert ssp. *cyaneocinctus* (Sing.) Snell & Dick.

Tylopilus cyaneocinctus (Sing.) Harrison & Grund.
Under *Picea* sp. (spruce). Kings Co. 1976-D.W.G., K.A.H. (Bolete herbarium of W.H. Snell, 2568, no. 63033 tagged to specimen).

Tylopilus gracilis (Pk.) Henn. *in* Engler & Prantl, Nat. Pflanzenfam. 1(1):190. 1900.
See *Austroboletus gracilis* (Pk.) Wolfe var. *gracilis*.

Tylopilus plumbeoviolaceus (Snell & Dick) Sing. *in* Am. Midl. Nat. 37:93. 1947.
Boletus plumbeoviolaceus Snell & Dick.
In deciduous or mixed woods. Kings Co. 1976-D.W.G., K.A.H. (ACAD 10384).

Tylopilus porphyrosporus (Fr.) Smith & Thiers *in* Boletes of Mich.:98. 1971.
Boletus porphyrosporus Fr.
Near building foundation and on lawns. Kings Co. 21 Sept. 1953-K.A.H. (KM-2442, 2998, 3787-3790, 5134, 5357 *in* DAOM).

Tylopilus pseudoscaber (Sing.) Smith & Thiers *in* Boletes of Mich.:96. 1971.
Porphyrellus pseudoscaber Sing.
In conifer wood with *Pinus* sp. (pine). Kings Co. 1976-D.W.G., K.A.H. (ACAD 10548).

Tylopilus rubrobrunneus Mazzer & Smith *in* Mich. Bot. 6:58. 1967.
In deciduous woods. Kings Co. 1973-D.W.G., K.A.H. (ACAD 10383).

Tympanis abietina Groves *in* Can. J. Bot. 30:599. 1952.
Stat. conid. *Pleurophomella eumorpha* (Penz. & Sacc.) Höhn.
On *Abies balsamea* (L.) Mill. (balsam fir). Colchester Co. 1952-J.W.G. (J.W.G.-527) (L.E.W.-1658).

Tympanis acericola Groves *in* Can. J. Res, C, 18:544. 1940.
On *Acer spicatum* Lam. (mountain maple). Colchester Co. 7 Sept. 1931-L.E.W. (W-1476) (J.W.G.-516).

Tympanis alnea (Pers.) Fr. var. **alnea** *in* Syst. Mycol. 2:174. 1822.
On branches of *Alnus* sp. (alder) and *Betula* sp. (birch). Colchester Co. 12 July 1929-L.E.W. (W-176, 284).

Tympanis alnea (Pers.) Fr. var. **hysterioides** Rehm *in* Ber. Bayer. Bot. Ges. 13:203. 1912.
On *Alnus viridis* DC. (alder). Colchester and Richmond Co. 12 July 1929-L.E.W. (W-326, 1239 fide J.W.G.).

Tympanis conspersa Fr. *in* Syst. Mycol. 2:175. 1822.
On *Malus pumila* Mill. (apple). Kings Co. 18 Dec. 1950-K.A.H., C.L.L.

Tympanis fasiculata Schw. *in* Syn. Fung. Am. Bor.:237. 1832.
On *Viburnum lentago* L. (sheep or nannyberry). Colchester Co. 13 July 1929-L.E.W. (W-272 fide J.W.G.).

Tympanis hypopodia Nyl. *in* Not. Sällsk. Fauna Flora Fenn. 10:72. 1868.
On *Pinus strobus* L. (white pine). 1975-L.P.M., J.M.M.

Tympanis prunicola Groves *in* Can. J. Bot. 30:614. 1952.
On *Prunus* sp. (stone fruit). 1952-J.W.G. (DAOM 4698, J.W.G.-550).

Tympanis spermatiospora (Nyl.) Nyl. *in* Not. Sällsk. Fauna Flora Fenn. 10:70. 1868.
Stat. conid. *Pleurophomella spermatiospora* Höhn.
On *Populus* sp. (poplar). Colchester and Kings Co. 27 June 1935-L.E.W. (W-1709) (O-4651).

Tympanis truncatula (Pers. ex Fr.) Rehm *in* Rabenhorst, Kryptogamenfl. 1(3):277. 1890.
Tympanis pinastri sensu Tul.
On *Abies balsamea* (L.) Mill. (balsam fir). Colchester and Halifax Co. 6 July 1929-L.E.W. (W-30, 31, 36, 1658, 1717) (J.W.G.-526).

Typhula gyrans Fr. *in* Syst. Mycol. 1:495. 1821.
On fallen leaves. Colchester Co. 21 Aug. 1931-L.E.W. (W-1776).

***Typhula incarnata** Lasch ex Fr. *in* Epicr. Syst. Mycol.:585. 1838.
Typhula itoana Imai.
On leaves of *Triticum aestivum* L. (winter wheat) and *Hordeum vulgare* L. (winter barley). Kings Co. 15 April 1976-C.O.G., R.W.D.

Tyromyces albellus (Pk.) Bond. & Sing. *in* Ann. Mycol. 39:52. 1941.
See *Tyromyces choineus* (Fr. per Fr.) Karst.

Tyromyces balsameus (Pk.) Murr. *in* Northern Polypores:13. 1914.
Polyporus balsameus Pk.
Tyromyces kymatodes (Rostk. sensu Bourd. & Galz.) Donk.
On *Abies balsamea* (L.) Mill. (balsam fir), *Picea glauca* (Moench) Voss (white spruce) and *Picea* sp. Colchester, Guysborough, Kings, Richmond and Victoria Co. 1930-J.H.F. (L.E.W.-1308, 1308a coll. A.H.S.) (KM-74, 5242, 5243 *in* DAOM, K.A.H.) (O-F2894) (WS-182, 219 *in* ACAD) (ACAD 5243, 5536, 5629, 5634, 6602).

Tyromyces caesius (Schrad. ex Fr.) Murr. *in* North Am. Flora 9:34. 1907.
Polyporus caesius Schrad ex Fr.
On *Abies balsamea* (L.) Mill. (balsam fir), *Acer rubrum* L. (red maple), *Acer* sp., *Betula* sp. (birch), *Fagus grandifolia* Ehrh. (beech), *Malus* sp. (apple), *Picea* sp. (spruce) and *Pinus resinosa* Ait. (red pine). Colchester, Cape Breton, Hants, Kings, Pictou and Victoria Co. 1908-A.H.M. (KM-77c, 797, 798, 799, 5245 *in* DAOM, K.A.H.) (L.E.W.-1481 det. J.L.L.) (O-F2900, 2901, 3333, 3822, 3831) (WS-179, 181, 217, 232, 253 in ACAD).

Tyromyces chioneus (Fr. per Fr.) Karst. *in* Rev. Mycol. 3(9):17. 1881.
Polyporus albellus Pk.
Polyporus chioneus Fr.
Tyromyces albellus (Pk.) Bond. & Sing.
On *Acer saccharum* Marsh. (sugar maple), *Alnus* sp. (alder), *Betula* sp. (birch), *Fagus grandifolia* Ehrh. (beech) and *Salix* sp. (willow). General. 1908-A.H.M. (L.E.W.-197, 1043, 1091) (A.R.P.-6041) (KM-80a,b, 805, 4192, 4255, 5246, 5247 *in* DAOM, K.A.H.) (O-F2988) (WS-140, 201, 220, 227, 252, 295 *in* ACAD).

Tyromyces fragilis (Fr.) Donk *in* Utrecht Rijksuniv. Bot. Mus. Meded. 9:148. 1933.
Polyporus fragilis Fr.
On *Abies balsamea* (L.) Mill. (balsam fir), *Picea* sp. (spruce) and other coniferous wood. Colchester and Kings Co. 21 Aug. 1931-L.E.W. (W-1377, 1477 det. J.L.L.) (KM-49, 1239, 4184, 4185 *in* DAOM, K.A.H.) (O-F2246, 2892) (WS-211, 234, 246, 260 *in* ACAD).

Tyromyces galactinus (Berk.) Bond. *in* Polyporaceae of Europe, USSR, Caucasia:189. 1953.
Polyporus galactinus Berk.
On *Betula lutea* Michx. f. (yellow birch) and *B. papyrifera* Marsh. (white birch). Kings Co. 20 June 1932-K.A.H. (KM-81, 81a, 2124 *in* DAOM, det. R.M.L.) (O-F2989) (ACAD 81, 1390).

Tyromyces guttulatus (Pk.) Murr. *in* North Am. Flora 9:31. 1907.
Polyporus guttulatus Pk.
On *Abies balsamea* (L.) Mill. (balsam fir), *Tsuga* sp. (hemlock) and other coniferous wood. Colchester Co. 10 Aug. 1931-L.E.W. (W-1247a) (ACAD 4190).

***Tyromyces immitis** (Pk.) Bond. *in* Polyporaceae of Europe, USSR, Caucasia:228. 1953.
Polyporus immitis Pk.
Tyromyces stipticus (Pers. per Fr.) Kotl. & Pouz. (but see Donk - Check List of European Polypores:194. 1974).
On deciduous wood. Kings Co. 17 Sept. 1959-K.A.H. (KM-4190 *in* DAOM).

Tyromyces mollis (Pers. per Fr.) Karst. *in* Rev. Mycol. 3(9):17. 1881.
Polyporus mollis (Pers.) Fr.
On *Abies balsamea* (L.) Mill. (balsam fir). 1975-L.P.M., J.M.M.

Tyromyces semisupinus (Berk. & Curt.) Murr. *in* North Am. Flora 9:34. 1907.
Polyporus semisupinus Berk. & Curt.
On *Betula lutea* Michx f. (yellow birch) and *Fagus grandifolia* Ehrh. (beech). Colchester Co. 20 July 1931-L.E.W. (W-1505, 1285a, 1307).

Tyromyces tephroleucus (Fr.) Donk *in* Utrecht Rijksuniv. Bot. Mus. Meded. 9:150. 1933.
Polyporus tephroleucus Fr.
On *Betula lutea* Michx. f. (yellow birch) and *Populus* sp. (poplar). Inverness and Kings Co. 1950-L.E.W. (O-F2992) (ACAD 1665) (WS-184, 186, 205, 223, 235, 276 *in* ACAD).

Tyromyces undosus (Pk.) Murr. *in* North Am. Flora 9:34. 1907.
Polyporus undosus Pk.
On decayed wood of *Picea* sp. (spruce). Kings Co. 27 Oct. 1976-W.P.S. (WS-301, 310 *in* ACAD).

*__Ulocladium atrum__ Preuss *in* Linnaea 25:75. 1852.
From crown of *Fragaria* sp. (cultivated strawberry), stems of *Satureja hortensis* L. (summer savory) and *Vaccinium angustifolium* Ait. (lowbush blueberry). Kings and Lunenburg Co. May 1967-C.O.G., S.J.H. (DAOM 166660).

*__Umbelopsis versiformis__ Amos & Barnett *in* Mycologia 58:805-808. 1956.
From diseased stem of *Vicia faba* L. (broad bean). Kings Co. 22 Feb. 1977-C.O.G. (DAOM 166755).

Uncinula adunca (Wallr. ex Fr.) Lév. *in* Ann. Sci. Nat. Bot., Sér. 3,15:151. 1851.
Uncinula salicis (DC.) Wint.
On *Populus grandidentata* Michx. (large toothed aspen), *P. tremuloides Michx.* (trembling aspen), *Salix discolor Muhl.* (pussy willow) and *S. lucida* Muhl. (shining willow). Kings Co. 9 Sept. 1952-D.W.C.

Uncinula circinata Cke. & Pk. *in* J. Bot. 10 (N.S.1):12. 1872.
On *Acer rubrum* L. (red maple). Pictou Co. 1909-W.P.F. (H.H.M., E.T.P.).

Uncinula flexuosa Pk. *in* Trans. Albany Inst. 7:216. 1872.
On *Aesculus hippocastanum* L. (horse chestnut). Pictou Co. 1909-W.P.F. (DAOM 1928) (DAOM 127431, I.L.C.).

Uncinula necator (Schw.) Burr. *in* North Am. Pyren.:15. 1892.
Powdery mildew on *Parthenocissus quinquefolia* (L.) Planch. (Virginia creeper) and *Vitis* spp. (grape). General. 7 Oct. 1929-J.F.H.

Uredinopsis americana Syd. *in* Ann. Mycol. 1:325. 1903.
Uredinopsis mirabilis (Pk.) Magn.
Stat. aecid. *Peridermium balsameum* Pk.
On *Abies balsames* (L.) Mill. (balsam fir), *Onoclea sensibilis* L. (sensitive fern) and *Woodwardia virginica* (L.) Sm. (chain fern). General. 17 Aug. 1909-W.P.F. (L.E.W.-17, 55, 1183, 1274, 1274a).

Uredinopsis atkinsonii Magn. *in* Hedwigia 43:123. 1904.
On *Abies balsamea* (L.) Mill. (balsam fir) and *Dryopteris thelypteris* (L.) Gray var. *pubescens* (Lawson) Nakai (marsh fern). General. 1913-W.P.F. (as *U. struthiopteridis*).

Uredinopsis longimucronata Faull *in* Contrib. Arnold Arbor. 11:44. 1938.
On *Athyrium filix-femina* (L.) Roth var. *michauxii* (Spreng.) Farw. (lady fern). 1938-J.H.F.

Uredinopsis osmundae Magn. *in* Hedwigia 43:123. 1904.
On *Abies balsamea* (L.) Mill. (balsam fir), *Osmunda cinnamomea* L. (cinnamon fern), *O. claytoniana* L. (interrupted fern), *O. regalis* L. var. *spectabilis* (Willd.) Gray (royal fern). General. 1913-W.P.F. (O-4948, 5126, 5166).

Uredinopsis phegopteridis Arth. *in* North Am. Flora 7:117. 1907.
On *Abies balsamea* (L.) Mill. (balsam fir), and *Dryopteris disjuncta* (Ledeb.) Morton (oak fern). Colchester and Pictou Co. 1913-W.P.F. (L.E.W.-1200).

Uredinopsis struthiopteridis Störmer ex Diet. *in* Bot. Notiser 1895:81. 1895.
On *Abies balsamea* (L.) Mill. (balsam fir) and *Pteretis pensylvanica* (Willd.) Fern. (ostrich fern or fiddleheads). General. 1913-W.P.F. (L.E.W.-1281).

Urnula craterium (Schw.) Fr. *in* Nova Acta Soc. Sci. Upsal. Sér. 3, 1:122. 1851.
On dead log. Kings Co. 26 Aug. 1933-K.A.H. (KM-1201 in DAOM).

Urocystis anemones (Pers.) Wint. *in* Rabenhorst, Kryptogamenfl. 1:123. 1881.
On *Hepatica acutiloba* DC. (liverleaf). 1953-G.W. Fischer (Manual North Am. Smut Fungi:212. 1953).

Urocystis occulta (Wallr.) Rab. *in* Klotzsch-Rabenhorst, Herb. Mycol., ed. 2:393. 1856.
On *Secale cereale* L. (rye). Colchester Co. 1903-B.D.H., J.A.K.

Uromyces acuminatus Arth. *in* Bull. Minn. Acad. Nat. Sci. 2:35. 1883.
Uromyces acuminatus magnatus (Arth.) Davis
Uromyces acuminatus spartinae (Farl.) Arth.
Uromyces spartinae Farl.
On *Arenaria lateriflora* L. (sandwort), *Lysimachia ciliata* L. (fringed loosestrife), *Maianthemum canadense* Desf. (wild lily-of-the-valley), *Spartina alterniflora* Loisel. (cord-grass), *S. patens* (Ait.) Muhl. (highwater grass), *S. pectinata* Link (slough grass) and *Spergularia canadensis* (Pers.) Don (seaside sand-spurrey). General. 1913-W.P.F. (O-3614) (DAOM 13101, 13105, 13106, 13110, 13112, 13114, 19189, 19190, 114567).

Uromyces americanus Speg. *in* Ann. Mus. Nac. Hist. Nat. B. Aires 19:310. 1909.
On *Scirpus validus* Vahl (bulrush). Pictou Co. 1913-W.P.F. (as *U. scirpi* (Cast.) Burr.).

Uromyces ari-triphylli (Schw.) Seller *in* Rhodora 44:174. 1942.
On *Arisaema stewardsonii* Britt. (jack-in-the-pulpit). General. 1913-W.P.F.

Uromyces caricinus Ell. & Ev. *in* Bull. Torrey Bot. Club:58. 1895.
On *Carex flava* L. (sedge). Kings Co. 1952-D.B.O.S. (coll. D.W.C., I.V.H.).

Uromyces dactylidis Otth *in* Mitt. Naturforsch. Ges. Bern 1861:85. 1861.
On *Dactylis glomerata* L. (orchard-grass), *Poa trivialis* L. (rough-stalked blue-grass) and *Ranunculus repens* L. (creeping buttercup). General. 1910-W.P.F. (O-4937) (L.E.W.-1266).

Uromyces dianthi (Pers.) Niessl *in* Verh. Nat. Ver. Brünn. 10(2):162. 1872.
On *Dianthus caryophyllus* L. (carnation). Cape Breton Co. 30 Aug. 1938-J.F.H.

Uromyces ervi Westend *in* Bull. Acad. R. Sci. Belg. 21, 2:234. 1854.
On *Vicia hirsuta* (L.) S.F. Gray (vetch). Antigonish Co. 14 Aug. 1956-D.B.O.S. (Savile 3258 *in* DAOM).

Uromyces fabae (Grev.) de Bary. ex Cke. *in* Grevillea 7:135. 1879.
On *Pisum sativum* L. (garden pea) and *Vicia cracca* L. (tufted vetch). General. 1913-W.P.F.

Uromyces fallens (Arth.) Barth. *in* Handb. North Am. Ured.:61. 1928.
On *Trifolium incarnatum* L. (crimson clover) and *T. pratense* L. (red clover). General. 1913-W.P.F. (O-1211, 1297, 4515).

Uromyces houstoniatus (Schw.) Sheldon *in* Torreya 9:55. 1909.
On *Houstonia caerulea* L. (bluets). Cumberland Co. July 1941-A.E.R. det. L.E.W.

Uromyces junci-effusi Syd. *in* Monogr. Ured. 2:290. 1910.
On *Juncus balticus* Willd. var. *littoralis* Engelm. (rush-grass), *J. effusus* L. (soft rush) and *J. filiformis* L. (rush-grass). Pictou Co. 1913-W.P.F. (D.B.O.S. 3261 *in* DAOM).

Uromyces limonii-caroliniani Savile & Conners *in* Mycologia 43:193. 1951.
On *Limonium nashii* Small (sea-lavender). Colchester, Kings and Pictou Co. 1913-W.P.F. (as *U. limonii* (DC.) Lév., O-5226).

Uromyces lineolatus (Desm.) Schroet. *in* Rabenhorst, Fung. Eur. Exs.:2077. 1876.
On *Cicuta maculata* L. (water hemlock), experimentally from III on *Scirpus*

maritimus L. var. *paludosus* (Nels.) Kukenth. Pictou Co. 1913-W.P.F.

Uromyces peckianus Farl. *in* Proc. Am. Acad. Arts Sci. 18:78. 1883.

On *Atriplex patula* L. (orach), *A. patual var. hastata* (L.) Gray, *Distichlis spicata* (L.) Greene (salt-grass), *Salicornia europaea* L. (glasswort) and *Suaeda maritima* (L.) Dumort. (sea-blite). Pictou Co. 1911-W.P.F.

Uromyces perigynius Halst. *in* J. Mycol. 5:11. 1889.

On *Carex deflexa* Hornem. (sedge grass), *C. flava* L. (sedge), *C. intumescens* Rudge (sedge), *C. nigromarginata* Schw. (sedge - a southern species, probably misidentified), *C. novae-angliae* Schwein. (sedge), *C. pensylvanica* Lam. (sedge), *C. projecta* MacKenz. (sedge), *C. scoparia* Schkuhr (sedge), *C. tribuloides* Wahlenb. (sedge), *C. varia* Muhl. (sedge), *Solidago bicolor* L. (white goldenrod) and *S. rugosa* Ait. (rough goldenrod). Mainly Colchester and Pictou Co. 1907-J.C.A.

Uromyces phaseoli (Rebent.) Wint. *in* Hedwigia 19:37. 1880.

On *Phaseolus vulgaris* L. (kidney bean). General. 5 Aug. 1927-L.E.W. (W-114 det. A.R.P.).

Uromyces plumbarius Pk. *in* Bot. Gaz. 4:127. 1879.

On *Oenothera biennis* L. (common evening primrose) and *O. parviflora* L. (small-flowered evening primrose). Kings Co. 11 July 1939-J.W.M. (O-671, 4959, 5812).

Uromyces polygoni-avicularis (Pers.) Karst. *in* Bidr. Finl. Nat. Folk 4:12. 1879.

On *Polygonum aviculare* L. (prostrate knotweed) and *P. fowleri* Robins. (knotweed). Annapolis, Colchester, Digby, Kings and Pictou Co. 1913-W.P.F. (O-4952, 4954).

Uromyces silphii Arth. *in* J. Mycol. 13:202. 1907.

On *Juncus tenuis* Willd. (rush-grass). Kings and Pictou Co. 1913-W.P.F.

Uromyces sparganii Cke. & Pk., *in* Peck, Annu. Rep. N.Y. State Mus. 26:77. 1874, subsp. **sparganii** Parmelee & Savile *in* Mycologia 46:832. 1954.

On *Acorus calamus* L. (sweet flag) and *Sparganium eurycarpum* Engelm. (giant bur-reed). Inverness Co. 1940-A.M.B., J.A.P., D.B.O.S. (DAOM 5167, 5218).

Uromyces striatus Schroet. *in* Abh. Schles. Ges. Vaterl. Cult. Abh. Naturwiss. 48:11. 1870.

On *Trifolium* sp. (clover). General. 1925-J.F.H. (as *U. medicaginis* Pass.).
Probably a misidentification of *U. trifolii* (Hebw. f. ex DC.) Lev.

Uromyces trifolii (Hedw. f. ex DC.) Lév. *in* Ann. Sci. Nat. Bot., Sér. 3, 8:371. 1847.

Uromyces trifolii (Hedw. f. ex DC.) Fckl. (Symb. Myc.:63. 1870).

On *Trifolium hybridum* L. (alsike clover) and *T. repens* L. (creeping white clover). General. 1913-W.P.F. (L.E.W.-1445, 1510, 1510a).

Uromyces triquetrus Cke. *in* Proc. Portland Soc. Nat. Hist. 1:184. 1862.

On *Hypericum boreale* (Britt.) Bickn. (St. John's wort), *H. canadense* L. (Canadian St. John's wort), *H. ellipticum* Hook. (pale St. John's wort), *H. perforatum* L. (common St. John's wort) and *H. virginicum* L. (St. Peter's wort). General. 1913-W.P.F. (O-4946, 4961, 5220).

Uromyces verruculosus Schroet. *in* Jahresb. Schles. Ges. Vaterl. Cult. 50:140. 1873.

On *Lychnis alba* Mill. (white campion). Kings Co. 11 Aug. 1936-J.F.H. det. I.L.C. (O-4322).

Ustilago anomala Kunze var. **anomala** *in* Fung. Sel. Exs.:23. 1875, (Probably *U. cilinodis* Savile *in* Can. J. Bot. 31:670. 1953).

On *Polygonum cilinode* Michx. (fringed bindweed). 1953-D.B.O.S.

Ustilago anomala Kunze var. **carnea** (Liro) Hirschh. *in* Farlowia 3:78. 1947.

On *Polygonum convolvulus* L. (wild buckwheat). Kings Co. 1950-L.E.W. (O-1298 det. A.S. Hill) (see D.B.O.S., Can. J. Bot. 31:669. 1953).

Ustilago avenae (Pers.) Rostr. in Overs. K. Dans. Vidensk. Selsk. Forh. 1890:13. 1890.
Loose smut of *Avena sativa* L. (oat) and *Hordeum vulgare* L. (barley). Kings and Pictou Co. 20 July 1925-J.F.H.

Ustilago bistortarum (DC.) Schroet. *in* Cohn, Beitr. Biol. Pflanz. 2:356. 1877.
Sphacelotheca borealis (Clint.) Schellenb.
Sphacelotheca hydropiperis (Schum.) de Bary.
On *Polygonum hydropiper* L. (water pepper), *P. hydropiperoides* Michx. (polygonum) and *P. sagittatum* L. (tear-thumb). Colchester and Pictou Co. 1913-A.H.M. (I.H.C.-786, 787).

Ustilago bullata Berk. *in* Flora N.Z. 2:196. 1855.
On *Agropyron trachycaulum* (Link) Malte (slender wheat-grass). Cumberland Co. 31 July 1933-J.F.H. (O-3117).

Ustilago hordei (Pers.) Lagerh. (sensu lato) *in* Mitt. Bad. Bot. Ver. 1889:70. 1889.
Ustilago kolleri Wille.
On *Avena sativa* L. (oat) and *Hordeum vulgare* L. (barley). General. 29 Aug. 1925-J.F.H. (O-4979, 4984, 5457).

Ustilago longissima (Sow) Tul. *in* Ann. Sci. Nat. Bot., Sér 3, 7:76. 1847.
Entyloma peninsulae Crowell.
On stems of *Glyceria grandis* Wats. (reed manna-grass). Kings Co. 31 July 1945-R.M.L., J.F.H. (as *E. peninsulae* from Pictou Co. 20 Aug. 1906 leg. W.P.F. det. I.H.C. no. 783: DAOM 13735-13737, type coll.).

Ustilago maydis (DC.) Cda. *in* Icon. Fung. 5:3. 1842.
Smut of *Zea mays* L. (corn). Kings Co. 20 Sept. 1943-J.F.H.

Ustilago neglecta Niessl *in* Rabenhorst, Fung. Eur. Exs.:1200. 1866.
On *Setaria glauca* (L.) Beauv. (yellow fox-tail). Kings Co. 1950-L.E.W. (A.E.R.-161).

Ustilago nuda (Jensen) Rostr. *in* Tidsskr. Landökon. 8:745. 1889.
Loose smut of *Hordeum vulgare* L. (barley), *Secale cereale* L. (rye) and *Triticum aestivum* L. (wheat). Kings Co. 1 July 1925-J.F.H., W.S.B. (O-5455, 5463).

Ustilago polygoni-punctati Savile *in* Can. J. Bot. 31:670. 1953.
Ustilago tenuispora Cif.
On *Polygonum punctatum* Ell. var. *majus* (Meisen.) Fassett (water smartweed). Digby Co. 1953-D.B.O.S. (E.C. Smith et al. 7101).

Ustilago utriculosa (Nees) Ung. *in* Einfl. Bod. 211. 1836.
Ustilago reticulata Liro.
On *Avena sativa* L. (oat), *Polygonum hydropiperoides* Michx. (mild water-pepper), *P. lapathifolium* L. (pale smartweed), *P. lapathifolium* var. *salicifolium* Sibth. (willow-leaved smartweed) and *P. sagittatum* L. (tear-thumb). General. 8 Sept. 1937-J.F.H.

***Valsa abietis** Fr. *in* Summa Veg. Scand.:412. 1849.
On wood of *Pinus strobus* L. (white pine). Kings Co. 30 April 1953-K.A.H., C.O.G., D.W.C.

***Valsa ambiens** (Pers. ex Fr.) Fr. *in* Summa Veg. Scand.:412. 1849.
On *Acer pseudoplatanus* L. (sycamore maple), *Castanea dentata* (Marsh.) Borkh. (American chestnut), *Malus pumila* Mill. (apple), *Ostrya virginiana* (Mill.) K. Koch and *Ulmus americana* L. (elm). Kings Co. 1 Mar. 1951-D.W.C., C.O.G.

Valsa amphibola Sacc. *in* Ann. Mycol. 6:560. 1908.
On *Malus pumila* Mill. (apple) and *Sorbus americana* Marsh. (mountain ash). Colchester Co. 7 Sept. 1929-L.E.W. (W-288, 292).

Valsa ceratophora Tul. *in* Sel. Fung. Carp. 2:191. 1863.
Sphaeria ceratosperma Fr.

Valsa ceratosperma Tode ex Fr.
On *Crataegus* sp. (hawthorn). 1962. (For. Insect Dis. Surv.:37. 1962).

Valsa cincta Fr. *in* Summa Veg. Scand.:411. 1849.
Leucostoma cinctum (Fr.) Höhn.
Stat. conid. *Cytospora cincta* Sacc.
On *Amelanchier* spp. (shadbush), *Malus* spp. (apple), *Prunus* spp. (stone fruits) and *Pyrus* spp. (pear). General. 26 July 1933-L.E.W. (W-1598, 1606).

Valsa delicatula Cke. & Ell. *in* Grevillea 6:10. 1877.
Stat. conid. *Cytospora delicatula* Shear.
On *Vaccinium angustifolium* Ait. (lowbush blueberry), *V. corymbosum* L. (highbush blueberry) and *V. macrocarpon* Ait. (cranberry). Kings and Yarmouth Co. 13 Apr. 1956-C.L.L., K.A.H., C.O.G. (DAOM 172332).

Valsa etherialis Ell. & Ev. *in* Proc. Acad. Nat. Sci. Phila.:341. 1894.
On *Acer saccharum* Marsh. (sugar maple). Colchester Co. 13 Aug. 1935-L.E.W. (W-1780).

*****Valsa floriformis** Ell. & Ev. *in* Proc. Acad. Nat. Sci. Phila.:222. 1890.
Cultured from pallid lesions on floricanes of *Rubus idaeus* L. (red raspberry). Colchester Co. 6 Aug. 1970-C.O.G.

Valsa friesii (Duby) Fckl. *in* Symb. Mycol.:198. 1870.
On *Abies balsamea* (L.) Mill. (balsam fir). 1930-J.H.F. (J. Arnold Arbor. 11:55-58).

*****Valsa intermedia** Nits. *in* Pyren. Germ.:199. 1870.
On wood of *Quercus rubra* L. (red oak). Kings Co. 6 Mar. 1951-D.W.C.

Valsa kunzei Fr. *in* Summa Veg. Scand.:411. 1849.
Leucostoma kunzei (Fr.) Munk.
On *Abies balsamea* (L.) Mill. (balsam fir) and *Pinus strobus* L. (white pine). Colchester and Halifax Co. 6 July 1929-L.E.W. (W-21, 21a, 223, 1676).

Valsa leucostoma (Pers. ex Fr.) Fr. *in* Summa Veg. Scand.:411. 1849.
Leucostoma persoonii (Nits.) Höhn.
Valsa personii Nits.
Stat. conid. *Cytospora leucostoma* Sacc.
On wood of *Crataegus* sp. (hawthorn), *Prunus* spp. (cultivated cherry, peach and plum, wild *Prunus* spp.) and *Sorbus americana* Marsh. (mountain ash). General. July 1929-L.E.W. (W-14, 288, 1008) (O-4640 det. J.W.G.).

Valsa nivea (Hoffm. ex Fr.) Fr. *in* Summa Veg. Scand.:411. 1849.
Leucostoma nivea (Fr.) Höhn.
On *Populus balsamifera* L. (balsam poplar), *P. grandidentata* Michx. (large-toothed aspen) and *P. tremuloides* Michx. (trembling aspen). Halifax and Kings Co. 7 Sept. 1929-L.E.W. (W-290).

Valsa pini (Alb. & Schw.) Fr. *in* Summa Veg. Scand.:412. 1849.
Stat. conid. *Cytospora pini* Desm.
On *Abies balsamea* (L.) Mill. (balsam fir) and *Pinus strobus* L. (white pine). 1961. (For. Insect Dis. Sur.:42. 1961).

Valsa salicina (Pers. ex Fr.) Fr. *in* Summa Veg. Scand.:412. 1849.
On *Populus* sp. (poplar). Colchester Co. 28 June 1931-L.E.W. (W-315).

Valsa sordida Nits. *in* Pyren. Germ.:203. 1870.
Stat. conid. *Cytospora chrysosperma* (Pers.) Fr.
Common on *Populus* spp. (poplar) and *Salix* spp. (willow). Colchester and Kings Co. 25 June 1926-J.F.H. (L.E.W.-100, 3001).

Valsa stenopora Tul. *in* Sel. Fung. Carp. 2:181. 1863.
On *Alnus* sp. (alder). Halifax Co. 5 Sept. 1929-L.E.W. (W-277).

*****Valsa subclypeata** Cke. & Pk. *in* Annu. Rep. N.Y. State Mus. 27:109. 1875.
On twigs of *Rubus hispidus* L. (trailing blackberry). Kings Co. 28 Feb. 1951-D.W.C.

Valsa truncata Cke. & Pk. *in* Annu. Rep. N.Y. State Mus. 25:103. 1873.
On *Alnus crispa* (Ait.) Pursh var. *mollis* Fern. (downy alder) and other *Alnus* spp. Colchester and Kings Co. 25 June 1926-L.E.W. (P379. W-11, 1700).

Valsaria moroides (Cke. & Pk.) Sacc. *in* Syll. Fung. 1:750. 1882.
On *Alnus* sp. (alder). Colchester Co. 23 July 1931-L.E.W. (W-1124).

***Valseutypella tristicha** (de Not.) Höhn. *in* Rehm, Ann. Mycol. 16:224. 1918.
Diatrype tristicha de Not.
On dead wood of small branches of *Prunus persica* (L.) Batsch (peach) following cold injury and infection by *Cytospora cincta* Sacc. Annapolis Co. 13 June 1973-C.O.G. (DAOM 145548 det. R.H.A.).

Vararia effuscata (Cke. & Ell.) Rogers & Jacks. *in* Farlowia 1:290. 1943.
On *Betula lutea* Michx. f. (yellow birch). Lunenburg Co. 1952. (For. Insect Dis. Surv.:20. 1952) (KM-2818 *in* DAOM, K.A.H.).

Vararia investiens (Schw.) Karst. *in* Bidr. Finl. Nat. Folk 62:96. 1903.
Radulum investiens Schw.
On *Rhododendron canadense* (L.) Torr. (rhodora). Colchester Co. 8 July 1931-L.E.W. (W-433).

Varicosporium elodeae Kegel *in* Ber. Dtsch. Bot. Ges. 24:213. 1906.
From crowns and roots of *Fragaria* sp. (cultivated strawberry) and fruit of *Vaccinium macrocarpon* Ait. (cranberry). Kings Co. Sept. 1963-C.O.G. (DAOM 145390).

Vascellum curtisii (Berk.) Kreisel & Dring *in* Feddes Repert. 68:86. 1963.
Lycoperdon curtisii Berk.
Lycoperdon wrightii Berk. & Curt.
From Hants, Kings and Lunenburg Co. 1913-A.H.M. (S.F.M.-194, 345, 346 *in* ACAD).

Venturia acerina Plakidas ex Barr *in* Can. J. Bot. 46:814. 1968.
Stat. conid. *Cladosporium humile* Davis.
On leaves of *Acer rubrum* L. (red maple). Kings Co. 21 Aug. 1952-D.W.C.

Venturia carpophila Fisher *in* Trans. Br. Mycol. Soc. 44:339. 1961.
Stat. conid. *Cladosporium carpophilum* Thüm.
Scab of *Prunus persica* (L.) Batsch (peach). Kings Co. 1903-B.D.H., J.A.K.

Venturia inaequalis (Cke.) Wint. emend. Aderh. *in* Hedwigia 36:81. 1897.
Stat. conid. *Spilocaea pomi* Fr.
Coniosporium mali Dearn. & Foster.
Scab of *Malus pumila* Mill. (apple). General. 1886-J.S.

Venturia macularis (Fr.) E. Müller & v. Arx *in* Ber. Schweiz. Bot. Ges. 60:366. 1950.
Stat. conid. *Pollaccia radiosa* (Lib.) Bald. & Cif.
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Stat. conid. *Fusicladium pyrorum* (Lib.) Fckl.
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Stat. conid. *Pollaccia elegans* Serv.
Fusicladium radiosum (Lib.) Lind var. *balsamiferae* Davis.
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Verticillium ovatum Berk. & A.B. Jacks.
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On submerged wood in cold streams. Annapolis, Halifax and Kings Co. 1908-A.H.M. (L.E.W.-P376) (KM-1033 *in* DAOM, K.A.H.) (ACAD 1033, K.A.H.).

Volutella sp.
From decayed roots of *Daucus carota* L. var. *sativa* DC. (carrot) and crown of *Fragaria* sp. (cultivated strawberry). Kings Co. Dec. 1964-C.O.G. (*in* DAOM).

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Henningsomyces filicina (Pk.) Kuntze.
Solenia filicina Pk.
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Corticium tulasnelloideum Höhn. & Litsch.
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Omphalia campanella (Batsch ex Fr.) Kummer.
Omphalia campanella (Batsch ex Fr.) Quél.
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Xylaria polymorpha (Pers. ex Fr.) Grev. *in* Flora Edinb.:355. 1824.
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Zygorhynchus vuilleminii Namysl.
From roots of *Fragaria* sp. (cultivated strawberry) and from soil. Cumberland and Kings Co. 11 June 1963-C.O.G.

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La Revue *Proceedings of the Nova Scotian Institute of Science* publie les travaux de l'Institut, des articles originaux et des notes avant trait aux sciences naturelles aux Provinces atlantiques, surtout dans les domaines de la biologie et de la géologie. Les manuscrits peuvent être en anglais ou en français, et seront soumis à l'avis d'experts avant d'être acceptés.

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Un résumé ne dépassant pas 200 mots doit précéder le corps du texte. Le texte lui-même doit comprendre les sections suivantes: introduction, méthodes, résultats ou observations, discussion, références bibliographiques. Dans certains cas, une systhèse de deux ou de plusieurs de ces sections peut être souhaitable.

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SUMMER DISTRIBUTION OF PARTICULATE ORGANIC MATTER IN A SALT-MARSH ESTUARY ON THE NORTHUMBERLAND STRAIT

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The summer distribution of particulate organic matter and relevant hydrographic characteristics are described in Merigomish Harbour, a salt-marsh estuary on the Northumberland Strait. The estuary is characterized by low phytoplankton biomass relative to similar estuaries in eastern United States. This is interpreted to be due to the low nutrient concentration in the source of the bottom water. Short-term fluctuations in stratification, surface nutrients, turbidity, and phytoplankton biomass appear to be controlled by short-term fluctuations in freshwater runoff. This control of short-term variability in estuarine characteristics by freshwater runoff may be characteristic of estuaries associated with small drainage basins. The particulate organic matter is dominated by detritus which is interpreted to be the degradation product of species of *Spartina*. Given the short residence time of the estuary and the high seston concentrations, Merigomish Harbour and similar estuaries along the western Gulf of St. Lawrence are significant sources of particulate organic matter to the coastal zone of the Gulf of St. Lawrence.

Les distributions estivales du matériel organique particulaire et des caractéristiques hydrographiques pertinentes, sont presenteés pour l'estuaire de type marois salant de Merigomish Harbour, region situee dans le détroit de Northumberland. Cet estuaire se caractérlse par une biomass phytoplanctonique faible par faible par rapport à des estuaires comparables de la côte est des Etâts-Unis. Ce resultat est attribué à une faible concentration en sels nutritifs de la couche d'eau de fond. La variabilité à court terme de la stratification, de la concentration des sels nutritifs de la couche de surface, de la turbidité et de la biomasse phytoplanktoniaire semblent sous le contrôle des fluctuations à court terme des apports d'eau douce. Un tel contrôle exercé par l'apport d'eau douce sur la variabilité a court terme des caractéristiques estuariennes est possiblement caracteristique des estuaires à faible bassins de drainage. Le matériel organique particulaire est principalement composé de matieres détritiques provenant, selon notre interprétation, de la dégradation de différentes espèces de *Spartina*. Considérant son court temps de résidence ainsi que ses fortes concentrations sestoniques, l'estuaire de Merigomish Harbour, de même que les autres estuaires comparables situés le long de la côte ouest du golfe Saint-Laurent représentent des sources importantes de matériel organique particulaire pour la zone cotière du golfe St.-Laurent.

Introduction

Because of the relative ease of repetitive sampling and the relative productivity of this environment, many studies have described the seasonal distribution of particulate organic matter (POM) in estuaries. Most estuaries have both a high concentration of POM in the water column and considerable temporal variability relative to offshore waters of the same latitude. The detrital component of POM, especially in shallow salt-marsh estuaries, is dominant (Darnell 1967; Odum & de la Cruz 1967; Biggs & Flemer 1972; Heinle & Flemer 1976; Haines 1977). Most of the above studies showed that detritus originates primarily from the transport of marsh grass to the open estuary and its subsequent decomposition in the water column. The phytoplankton component of the POM during the growth season (although often a small fraction of the total) is a dynamic fraction that may be rapidly replacing itself. Phytoplankton production over the growth season in many estuaries is often higher than in the contiguous offshore waters (Riley 1967).

The marked short-term temporal variability in the phytoplankton component of the POM has frequently been associated with parallel fluctuations in the degree of vertical density stratification (see review by Sinclair et al. 1981). In most cases, however, the factors controlling short-term variability in either the physical or plankton distributions have not been adequately defined owing to inadequate sampling intensity. The short-term temporal variability in the detrital component has in one study been linked to the combined effects of neap-spring and semi-diurnal tidal components (Odum & de la Cruz 1967).

The aim of this study is to describe adequately and hopefully explain the summer temporal distribution (absolute concentration as well as variance) of both the detrital and phytoplankton components of the POM in a shallow salt-marsh estuary. The study area, Merigomish Harbour (Nova Scotia, Canada; Fig 1), is one of many similar salt-marsh estuaries bordering the western portion of the Gulf of St. Lawrence. According to Teal and Teal (1969), these Gulf of St. Lawrence estuaries are among the few that have not been abused by mankind. Thus, the conclusions of the study may be generally applicable to the relatively unpolluted salt-marsh estuaries in the Gulf of St. Lawrence.

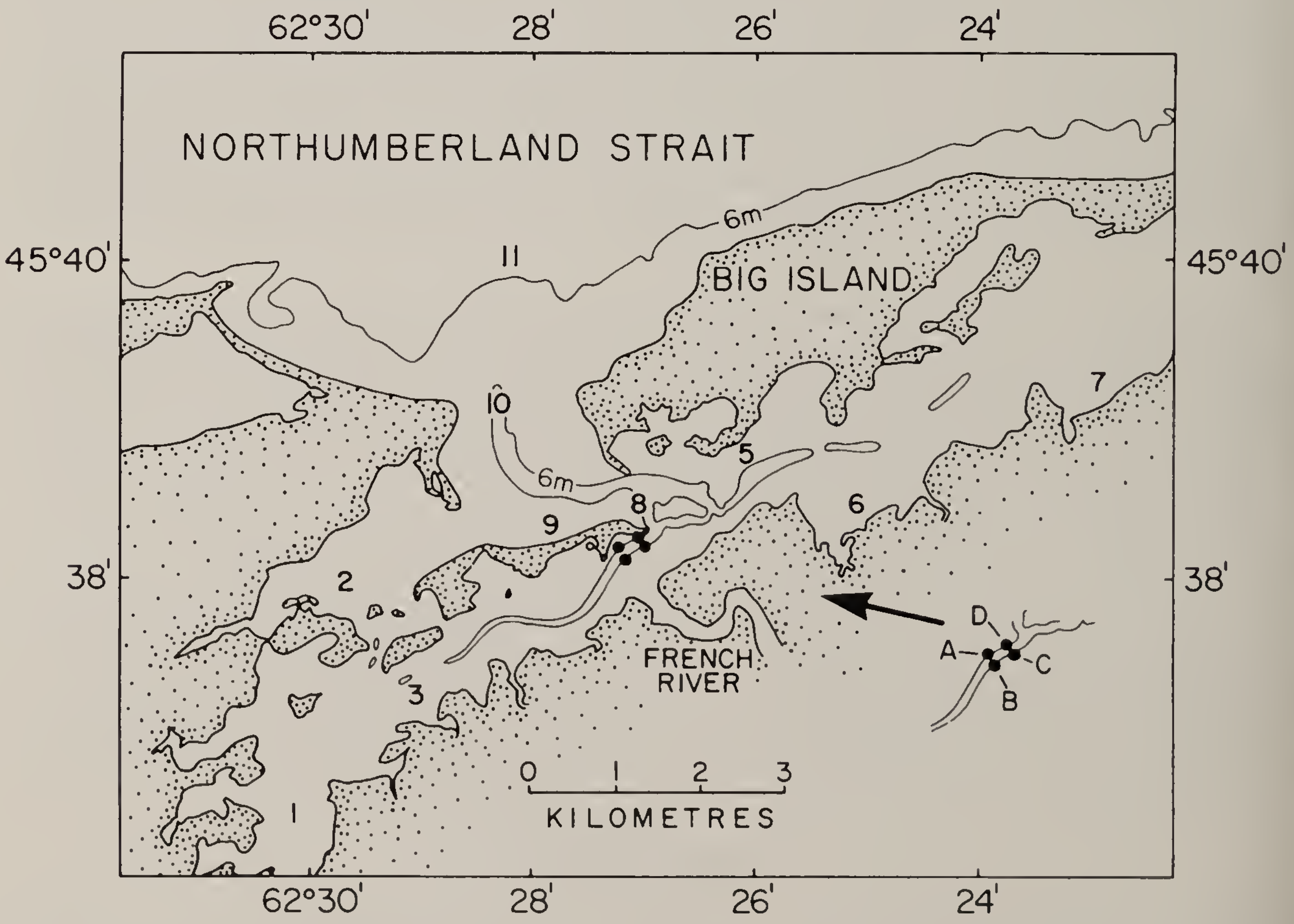

Fig 1 Sampling locations within Merigomish Harbour. Stations 1 to 11 were sampled during the spatial distribution study on July 16 only (Station 4 was at Location A). Stations A, B, C, and D were sampled hourly during the semi-diurnal tidal variability study. Station A was routinely sampled during the overall study period (May through August).

Methods

Merigomish Harbour, bordering on the Northumberland Strait, is a shallow estuary ($<$15 m depth) with an average tidal amplitude of 0.8 m. Its surface area barely exceeds 14 km^2. The estuarine banks are densely populated by *Spartina alterniflora*. The estuary can be classified as mesotidal following Haynes (1975), because of its narrow opening to the sea and many internal channels.

The sampling program extended from 4 May to 29 August 1977 at several sampling stations (Fig 1). Three different sampling schemes were used: 1) Station A was visited 3 times daily (0900, 1200, and 1500 h) during 3 different days of the week over most of the study period; 2) a spatial series was made on 16 July 1977, at Stations 1 to 11 and A, to see if Station A was representative of the estuary as a whole; and 3) a semi-diurnal time series with hourly sampling was made for two transects (Stations A-B and C-D) in order to examine the major mixing processes of the estuary.

All variables were sampled at 0, 1, 3, 5, 8, and 10 m at Station A. For Stations 1 to 11, sampling depths were selected according to the depth of the water column. Samples for several biological variables were collected in triplicate from a 5 l Niskin bottle, all water samples being prefiltered with a 202 μm Nitex screen aboard the boat. Salinity and temperature were measured using a cruciform drag device first described by Jacobson (1909) and later modified by Pritchard and Burt (1951). Light extinction coefficients were estimated using a 30 cm Secchi disk and Holmes' (1970) numerical equation. Other physical variables such as freshwater runoff, wind speed and direction, precipitation, and solar radiation were obtained from nearby stations operated by the Department of Lands and Forests of Nova Scotia, and Environment Canada, Charlottetown (P.E.I.).

All particulate material was collected on a Whatman GF/C filter of pore size equivalent to 0.8 μm. For adenosine triphosphate analysis, a volume of 100 ml was filtered. Small volumes of water are important to eliminate the non-linear effects introduced when using large volumes of seawater (Sutcliffe et al. 1976; Sinclair et al. 1979). The method of Holm-Hansen and Booth (1966) was used for the ATP analysis. Chlorophyll α was determined using the modified method of Yentsch and Menzel (1963) as described in Strickland and Parsons (1972). Amounts of nitrate, phosphate, and silicate were estimated by the Auto-Analyzer (Technicon) following the method of Strickland and Parsons (1972). Analyses of particulate organic carbon and nitrogen were performed with a Perkin Elmer Elemental Analyser as described by Strickland and Parsons (1972).

Results

Physical Data

The temporal distributions of daily averaged salinity, temperature, and σ_t for Station A are shown in Figure 2. There were intermittent pulses of low-salinity water at the surface throughout the sampling period, resulting in variable salinity stratification with depth. In contrast, the water column was relatively isothermal with depth by the end of June. Subsequently the whole water column progressively warmed to 20°C. Vertical temperature differences therefore did not contribute significantly to density stratification of the water column during the latter half of the summer. The pulses of low-salinity water, presumably from runoff from the drainage basin, caused marked changes in the degree of density stratification in the water column (Fig 3). It is also of interest that, at least over the period sampled, there was little seasonal decrease in stratification following spring freshet; short-term variability was more important than seasonal variability.

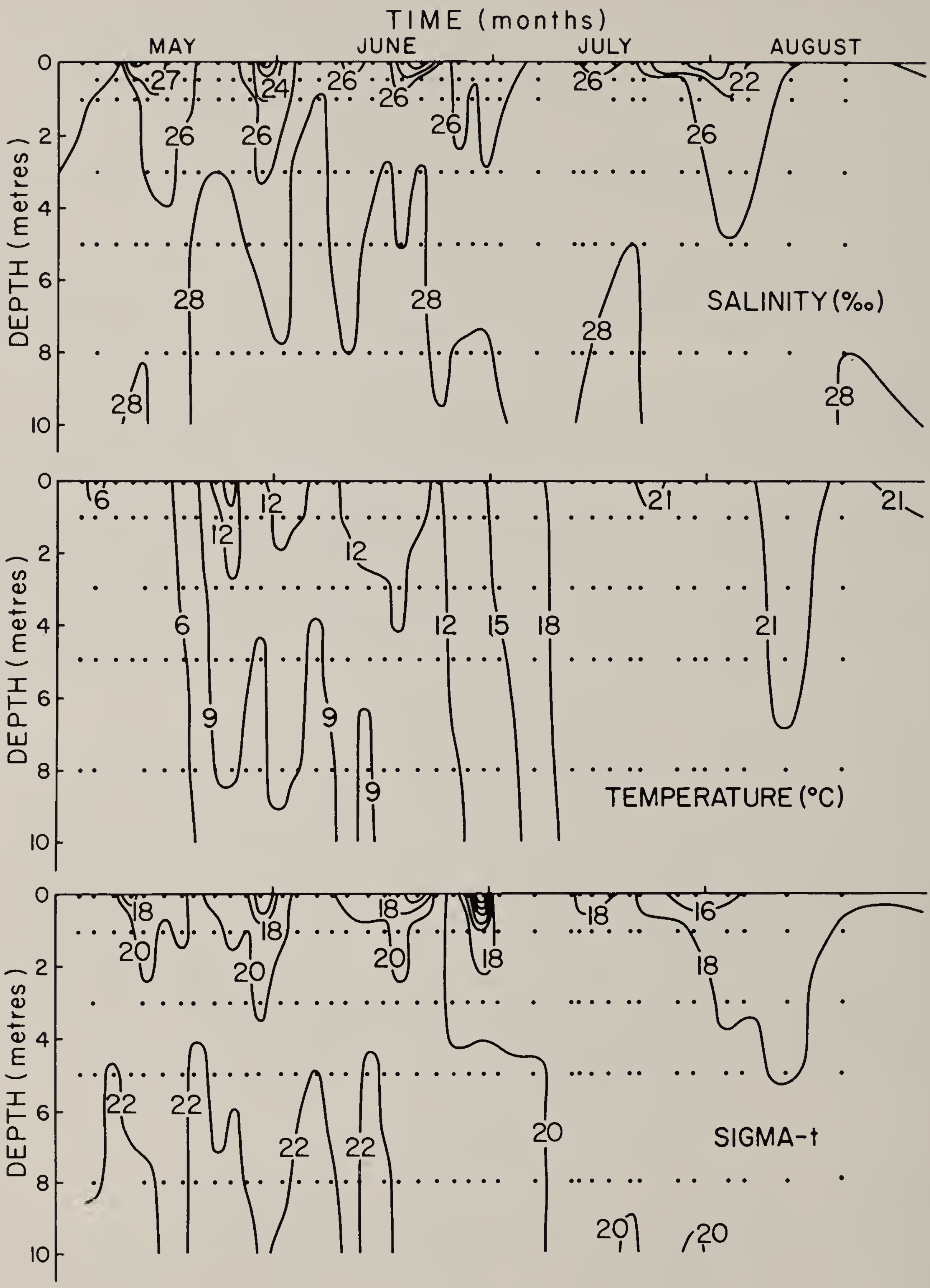

Fig 2 Depth distribution of salinity, temperature, and Sigma-t at Station A during the study period.

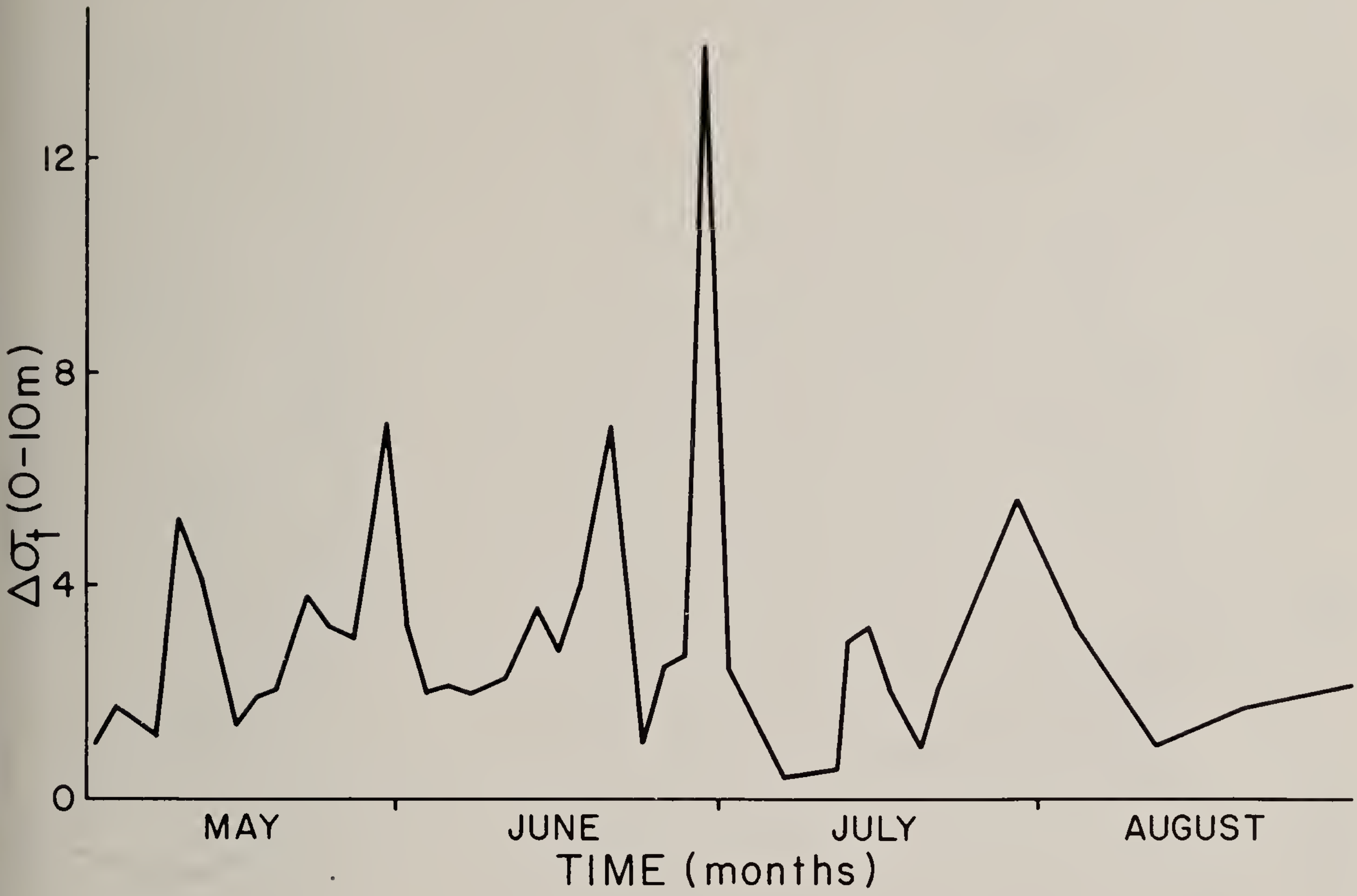

Fig 3 Temporal variability in water column density stratification at Station A during the sampling period.

It was expected that the relative importance of physical variables (Fig 4) on the water-column stratification could be inferred from a correlation matrix (Table I). Precipitation, however, was the only variable significantly correlated with density stratification. Temporal variations in incident solar radiation and the coefficient of light extinction reveal 2 points of interest. There was some correspondence between light extinction, reflecting turbidity changes, and density stratification, inferred to be a function of short-term variability in freshwater runoff. Secondly, from critical-depth considerations (Sverdrup 1953) the water column was not light-limited with respect to phytoplankton dynamics over the sampling period (Couture 1979). Precipitation was positively correlated with both $\Delta\sigma_t$ and light extinction (Table I), suggesting that stratification and turbidity were functions of freshwater runoff (even though freshwater runoff itself was not significantly correlated with any of these 3 variables). Probably the estimates of freshwater runoff do not adequately represent runoff from the drainage basin.

Circulation and mixing characteristics of the water column were examined using the classification diagram of Hansen and Rattray (1966). During neap-tide, when the currents were estimated, Sections A-B and C-D fall in Area 2a of the diagram (Figure 6, upper; Table II). According to their model, circulation in the estuary is dominated by a two-layer flow system, where salinity stratification is slight. More than 90% of the mixing is accomplished by turbulent diffusion (Fig 6, lower). Residence time can be estimated for the estuary using Ketchum's (1950) model. The model assumes complete vertical mixing (no water column stratification), which is not strictly upheld for Merigomish Harbour. Thus the estimated residence time of four days must be considered as a minimum value (or an underestimate).

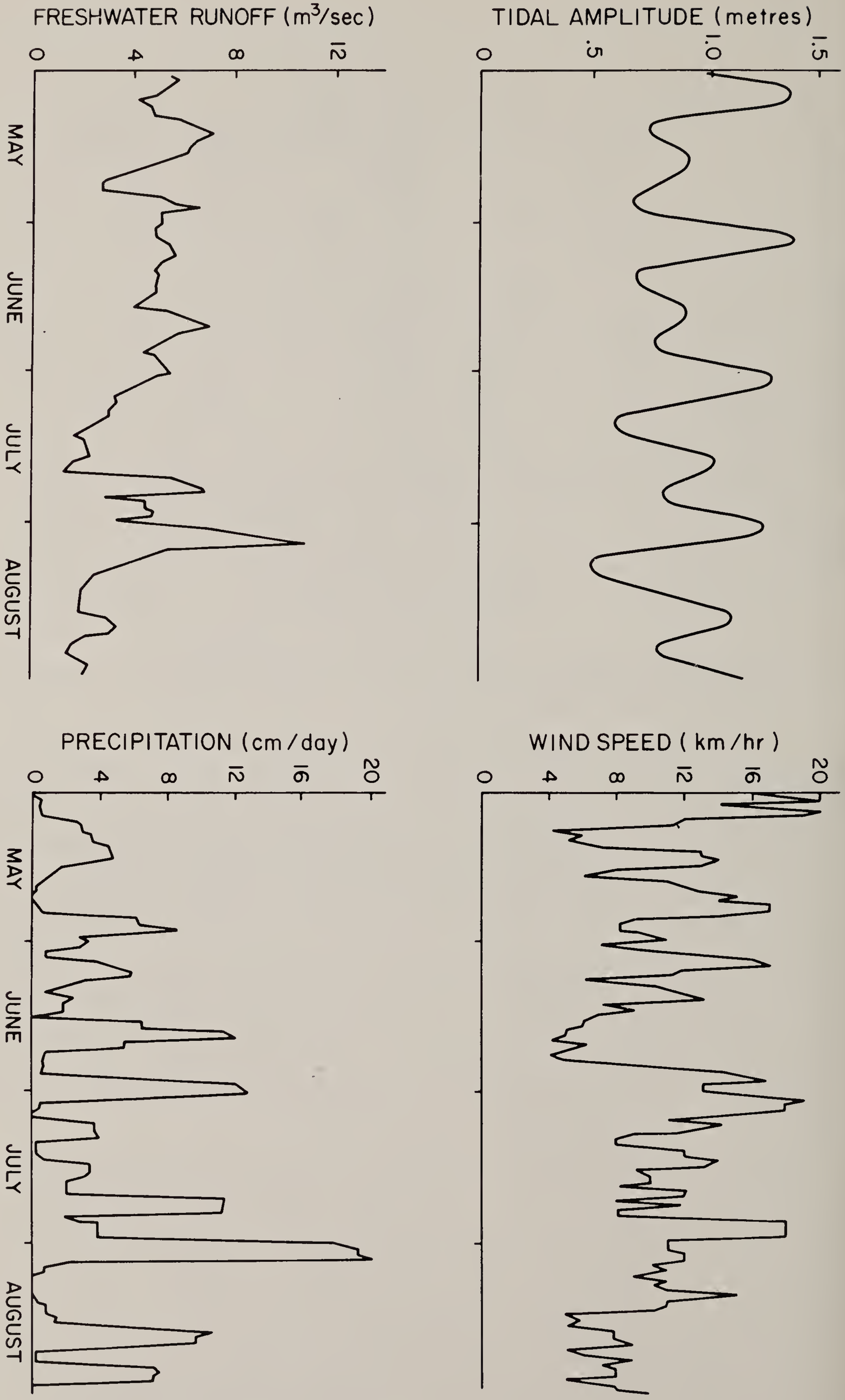

Fig 4 Temporal variability in factors contributing to density stratification at Station A over the sampling period.

Table I Correlation matrix[1] of various variables estimated for Merigomish Harbour Estuary

	Tidal Amplitude	FW Runoff	Precipitation	Wind	Coefficient of Extinction	Nitrate	Silicate	Phosphate	Particulate Organic Carbon	Particulate Organic Nitrogen	Detritus	Chlorophyll a
Δt	- -	- -	0.74 0.43	- -	0.71 0.67	- -	0.55 -	- -	- 0.57	0.44 -	- 0.65	- -
Tidal Amplitude		- -	- -	0.43 -	- -	- -	- -	- -	- -	- -	- -	- -
FW Runoff			- 0.40	- -	- -	- -	- -	- -	- -	- -	- -	- -
Precipitation				- -	0.71 0.58	- -	0.62 0.44	- -	- -	0.47 -	- -	0.47 -
Wind					- -	- -	- -	- -	- -	- -	- -	- -
Coefficient of Extinction						- -	0.72 0.59	- -	0.47 0.75	0.59 0.53	0.45 0.71	0.64 -
Nitrate							- 0.41	- 0.65	- -	- 0.46	- -	- 0.83
Silicate								-	- 0.52	0.57 0.59	- -	- -
Phosphate									0.54 -	0.53 0.54	0.53 -	- 0.86
Particulate Organic Carbon										0.79 0.80	0.99 0.94	- -
Particulate Organic Nitrogen											0.65 0.57	0.52 0.58
Detritus												- -

[1] The first value of r for each pair is that for the months of May and June, the second value is that for the months May to August. Only correlations significant at the 1% level are indicated.

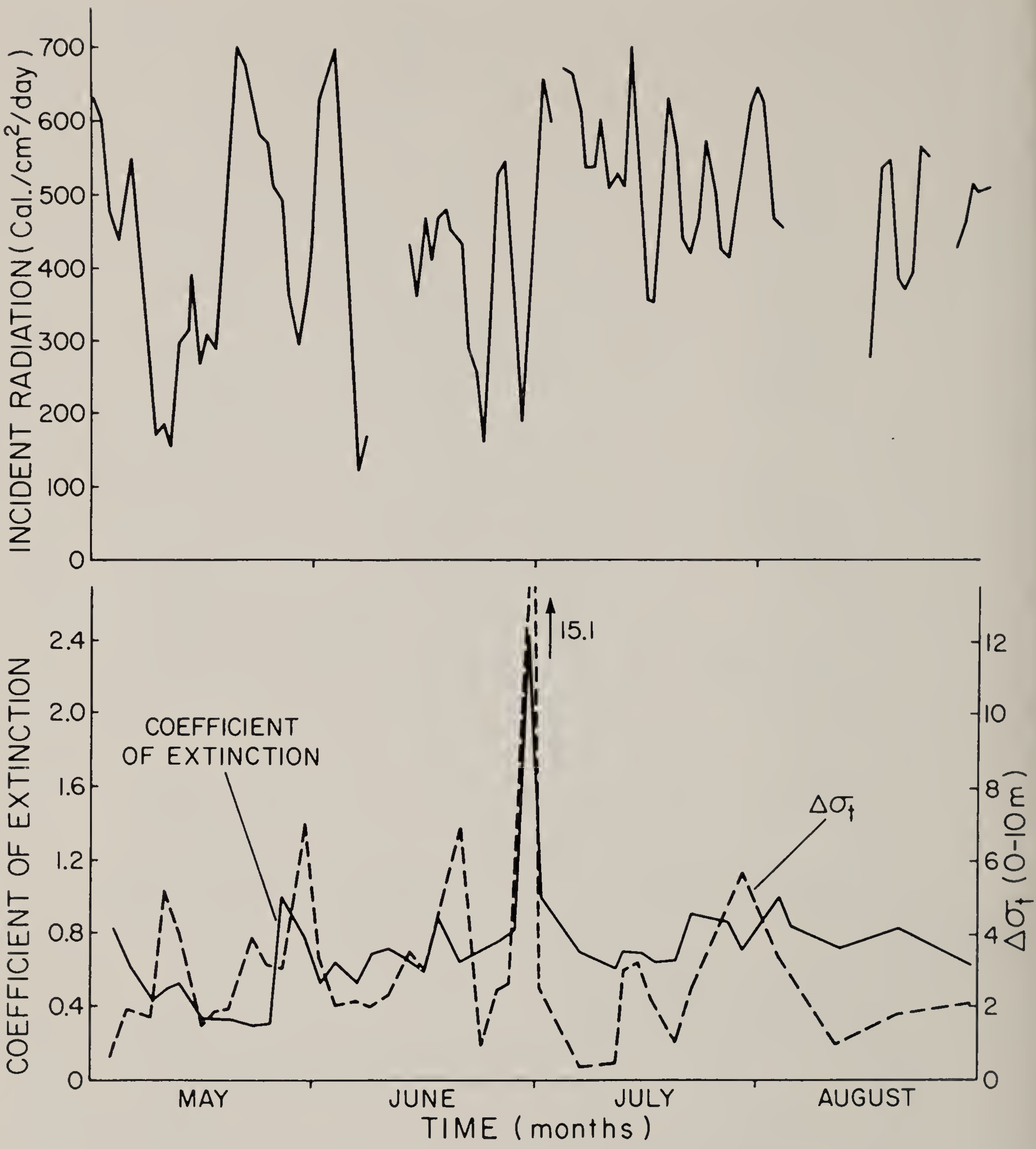

Fig 5 Temporal variability in incident radiation (3-day running means), the coefficient of extinction, and density stratification at Station A during the sampling period.

Biological Data

A one-way analysis of variance of data between all stations and depths on July 16 revealed no significant difference in the spatial distribution of chlorophyll *α* within Merigomish Harbour (Table III, see Fig I for station locations). On this basis, it may well be that the relatively high-frequency temporal observations at Station A were representative of the estuary as a whole. The semi-diurnal variability in chlorophyll *α* was also clearly low in relation to the sampling variability between days (Fig 7). It is clear that the day-to-day variability in phytoplankton biomass in the estuary was not masked by higher frequency variability as has been observed in other estuaries (Welch & Isaac 1967).

During the study period chlorophyll *α* concentrations varied from 0.26 to 2.27 mg/m^3 (mean 0.66 mg/m^3). The water column concentration varied within relatively narrow limits (ca. 4 to 8 mg/m^2) until mid-July. Subsequently, there was a

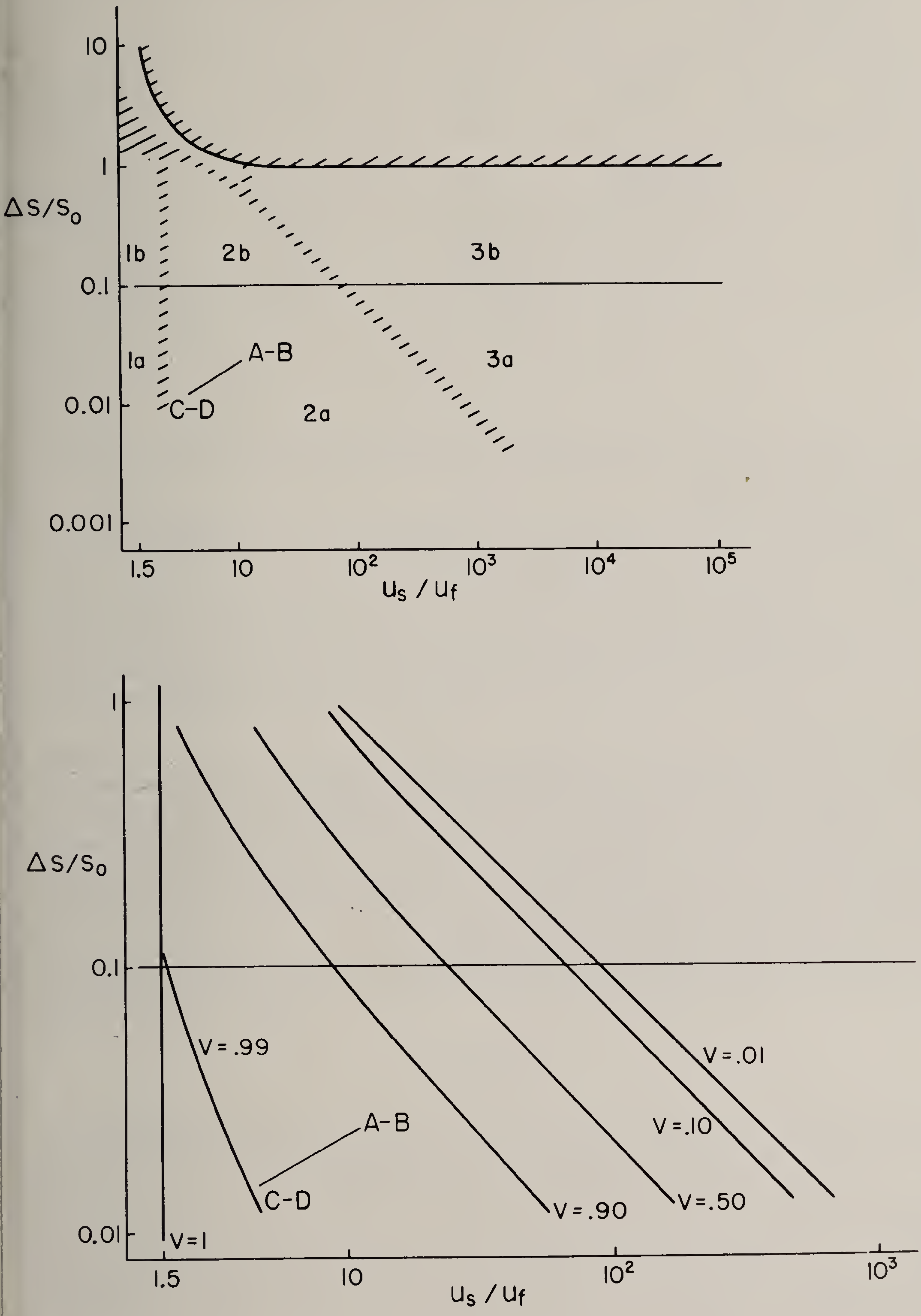

Fig 6 Location of Transects A-B and C-D in the estuarine stratification—circulation model of Hansen and Rattray (1966).

Table II Values of parameters necessary for the Hansen and Rattray (1966) stratification-circulation estuarine classification model. (ΔS is the top-to-bottom salinity difference, S_0 is the mean salinity over the section, U_s is the net surface current, and U_f is the mean freshwater velocity through the section.)

Parameters	Station A	Station B	Station C	Station D
U_s (m/s)	0.100	0.060	0.040	0.035
U_f (m/s)	6.7×10^{-3}	6.7×10^{-3}	6.7×10^{-3}	6.7×10^{-3}
ΔS (0/00)	1.10	0.92	0.51	0.50
S_0 (0/00)	27.07	27.03	27.08	27.08

steady increase to the end of August (Fig 7). The phytoplankton biomass estimates are low relative to those of other shallow estuaries on the eastern seaboard of the United States (Riley 1967).

The time-depth variability in inorganic nutrient concentrations in relation to the chlorophyll *a* distribution is shown in Figure 8. There was considerable surface variability in dissolved silicate and nitrate but not in phosphate concentration. The increases in nutrients at the surface, rather than in the bottom water, indicate that freshwater runoff was a more important source of nutrients than was estuarine entrainment of bottom water or regeneration from sediments. As in the phytoplankton biomass, there was a gradual seasonal increase in nitrate and phosphate, but no trend in silicate.

Over the whole study period chlorophyll *a* and nitrate as well as chlorophyll *a* and phosphate were positively correlated (Table I). However, for the months of May and June, which were characterized by considerable physical variability, these variables were not significantly correlated. Silicate concentrations were correlated with precipitation, stratification, and turbidity, but not with chlorophyll *a*. During the first two months of the study, chlorophyll *a* concentration was also statistically related to precipitation and turbidity.

The summer distribution of living carbon (from A.T.P.), total particulate organic carbon, and non-living organic carbon (detritus) is shown in Figure 9. The general

Table III Analysis of variance of chlorophyll a, estimated during a spatial-distribution study within Merigomish Harbour Estuary

Source of Variation	Sum of squares	Degrees of freedom	Mean squared	F
Between Group	0.18	10	0.018	0.86*
Error	0.36	17	0.021	
Total	0.54	27		

*n.s. at P – 0.05

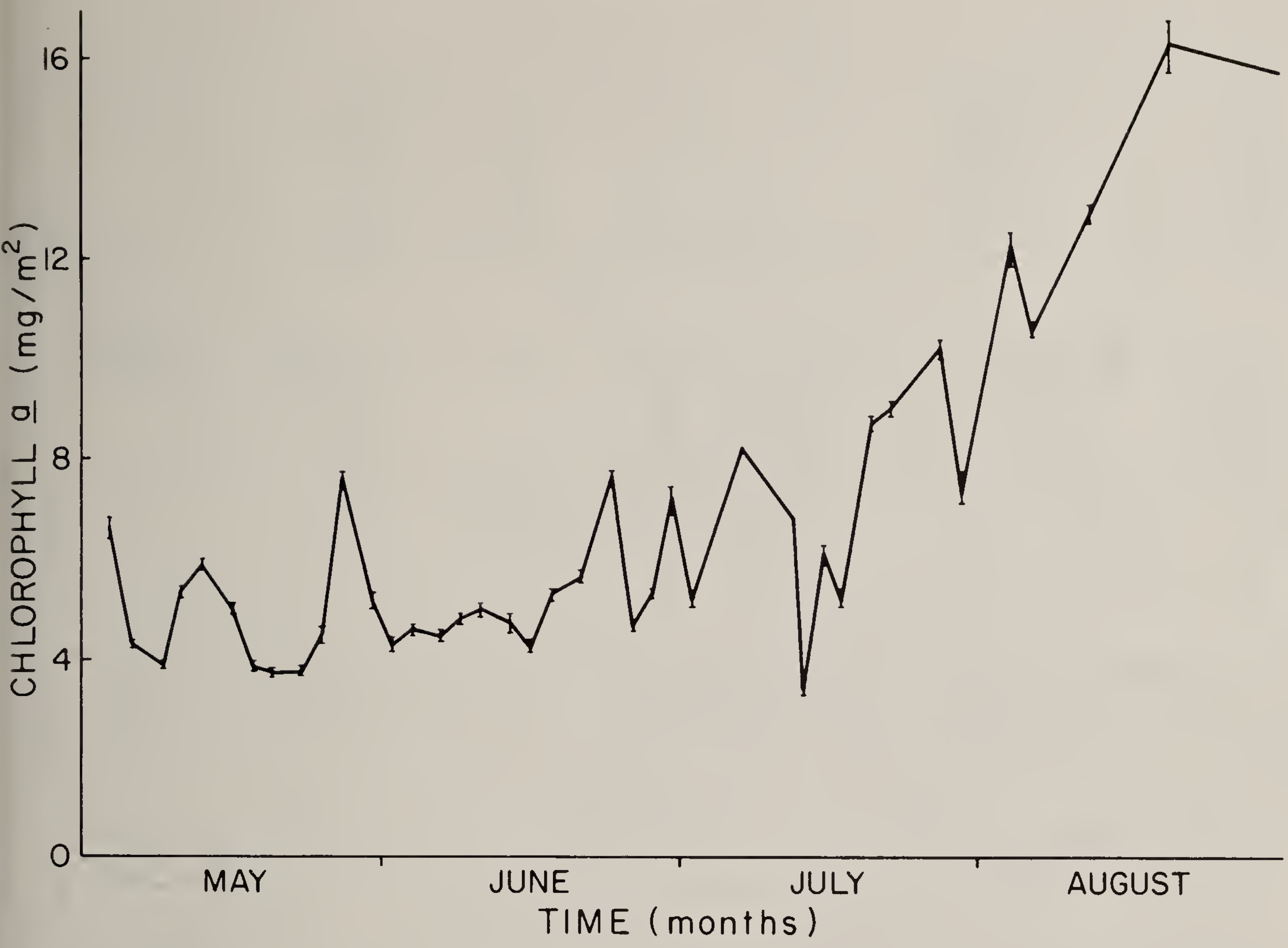

Fig 7 Temporal variability in an estimate of water column phytoplankton biomass at Station A during the sampling period. Error bars are S.D. based on 3 estimates within 6h.

pattern of distribution of living carbon resembled that of phytoplankton biomass (chlorophyll *a*), but the short-term variations were not in phase (the two variables not being significantly correlated). Detritus was the predominant component, contributing 82% in May and June and 67% in July and August. There was not a trend of increasing detritus or seston during July and August, as was the case for the living biomass (both chlorophyll *a* and A.T.P.) and two of the inorganic nutrients (nitrate and phosphate). Living carbon was significantly correlated with stratification and turbidity. There is a linear relationship between particulate organic carbon and particulate organic nitrogen (Fig 10), indicating a C:N ratio of ca. 6 (g:g) at mean levels of these variables.

Discussion

Phytoplankton biomass during the summer months within Merigomish Harbour was low in comparison with other shallow salt marsh estuaries along the eastern seaboard of the United States (Riley 1967). The vertical distribution of nitrate suggests that the source of bottom water within the estuary is nutrient poor. The source is no doubt the upper mixed layer water from the Northumberland Strait, which would be expected to be poor in nutrients during the summer months. Thus, estuarine entrainment within Merigomish Harbour does not appear to be an important mechanism for vertical nutrient transport as it is in many estuaries (Riley 1967; Sinclair et al. 1981). From mid July to the end of August there was a gradual increase in both nitrate and phosphate, as well as in phytoplankton biomass (chlorophyll *a* A.T.P.). It is of interest to speculate on the nutrient sources during this period of increase. Prior to mid July the nitrate and silicate concentrations

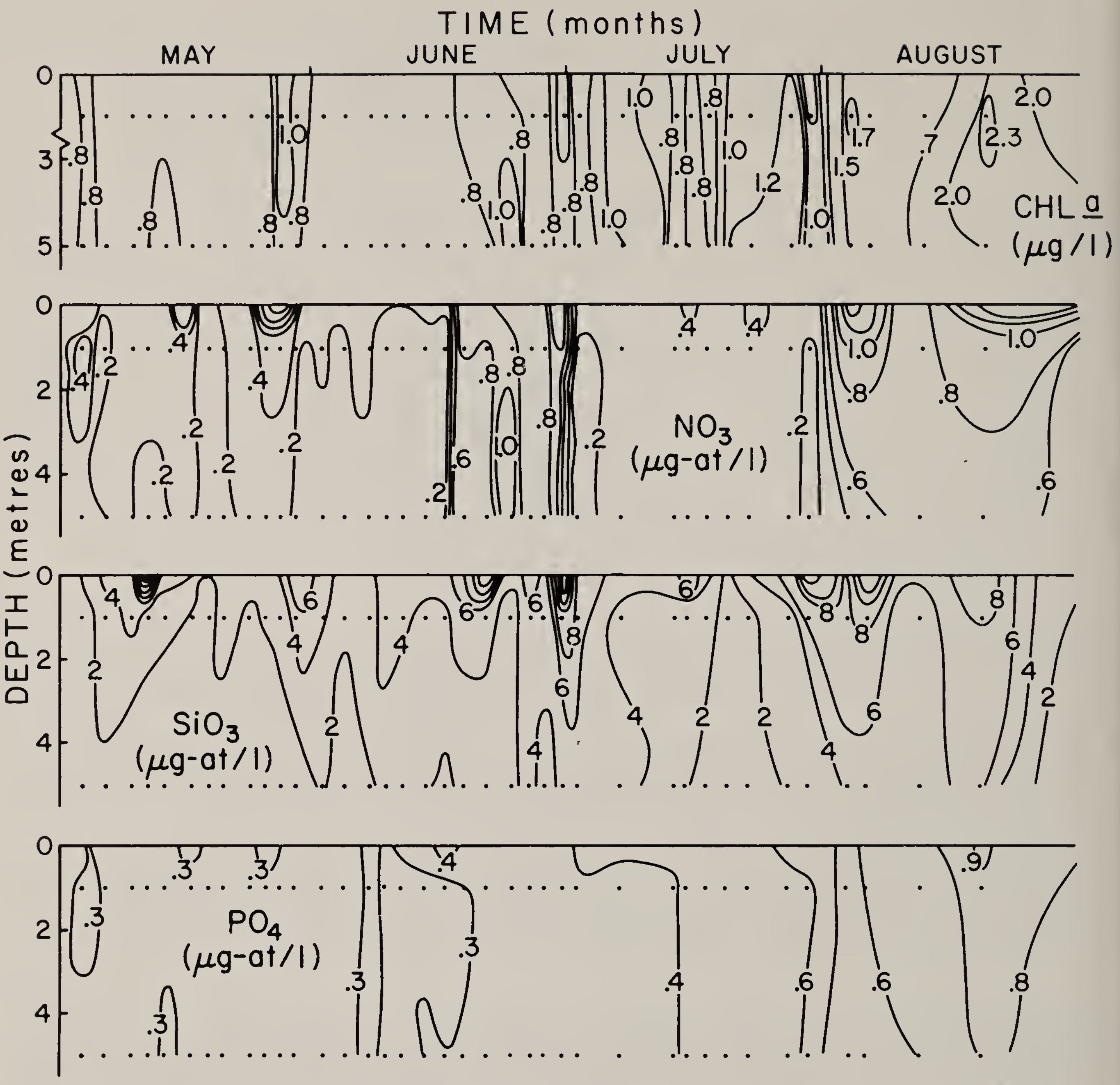

Fig 8 Depth distribution of an estimate of phytoplankton biomass and inorganic nutrients at Station A during the sampling period.

paralleled one another, interpreted to be in response to short-term fluctuations in freshwater runoff. In contrast, during the latter half of the study period nitrate and phosphate concentrations behaved similarly (increasing) but silicate concentrations continued to reflect the runoff variability. Thus, it can be interpreted that the new source of nitrate and phosphate was from regeneration of organic detritus (probably from *Spartina* breakdown).

As in many estuaries (Sinclair et al. 1981), Merigomish Harbour is characterized by marked short-term variability in water column density stratification (Fig 3). The correlation analysis (Table I) suggests that this variability in stratification is a function of freshwater runoff. This is unusual and is probably due to the small size of the drainage basin. In estuaries with a large drainage basin runoff is relatively smooth, the dominant characteristic being the spring freshet. The short-term variability in stratification of most estuaries has been interpreted to be a function of neap-spring tidal variability or to be wind induced (Sinclair et al. 1981). In this estuary the short-term variability in runoff is greater than seasonal variability and appears to dominate the observed fluctuations in the estuarine characteristics. The short-term variability in precipitation, stratification, nutrients, chlorophyll, and

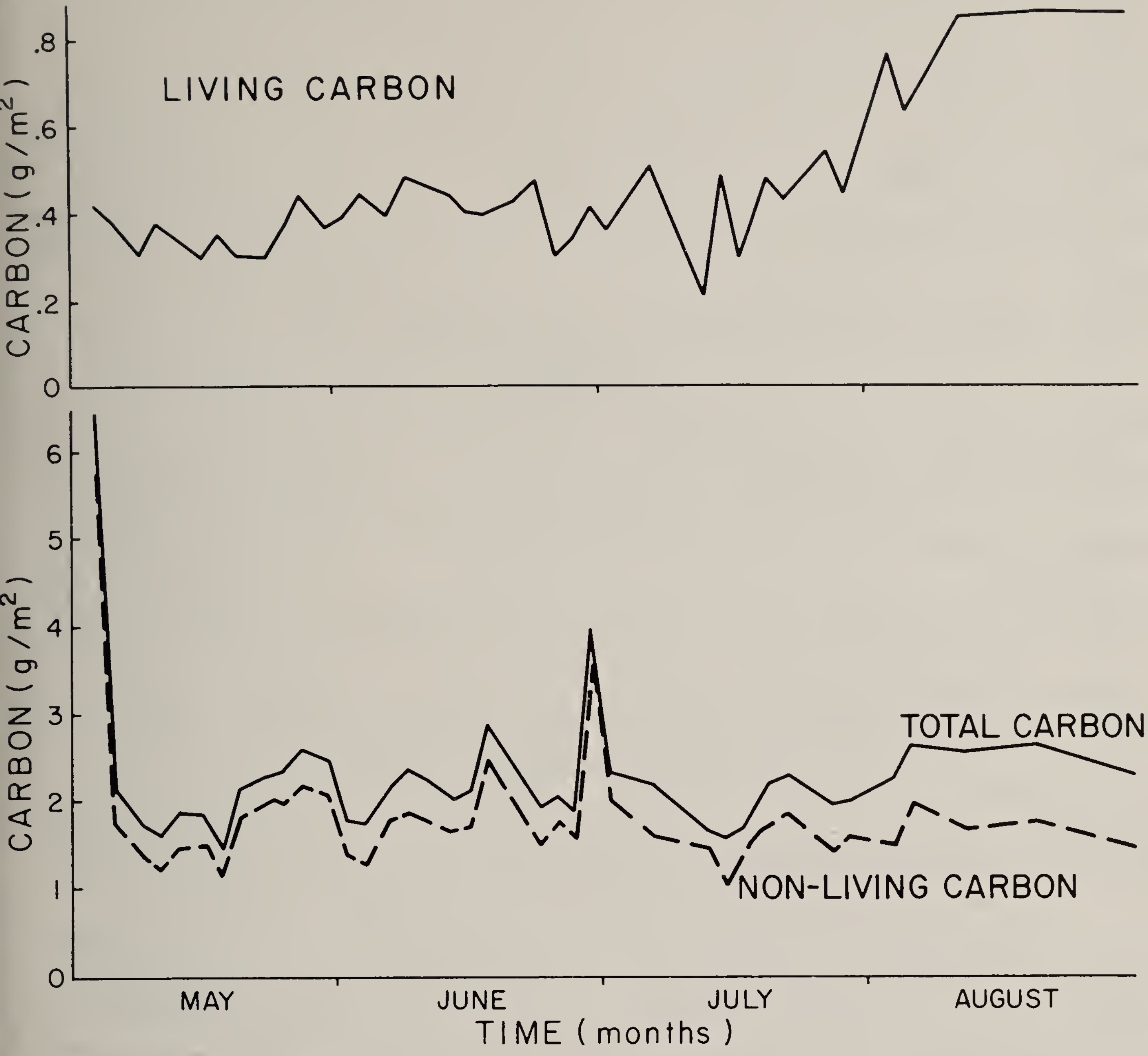

Fig 9 Temporal distribution of living, non-living, and total particulate carbon in the water column at Station A during the sampling period.

A.T.P. are related in a plausible manner (Table I). It appears that pulses in runoff provide a nutrient source for moderate increases in phytoplankton growth.

As is characteristic of salt-marsh estuaries (Heinle & Flemer 1976; Biggs & Flemer 1972; Odum & de la Cruz 1967), detritus was the dominant fraction of the particulate carbon in the water column. By inference from studies in similar environments it is probable that the source of detritus is *Spartina* (Darnell 1967; Day et al. 1973; Gosselink et al. 1974; Teal 1962; Axelrad et al. 1976). The particulate C:N ratio of Ca. 6 is not expected, if the source is predominantly *Spartina* ratio 22.5:1 for living material; McIntyre and Dunstan 1976). As the particle size of *Spartina* detritus decreases, however, the C:N ratio has been observed to decrease (Gosselink and Kirbey 1974). The low C:N ratio of the detritus, if it is indeed from *Spartina,* may result from bacteria on the particles (Meyers et al. 1970; 1971; Hood and Colmer 1971; Berrie 1972). The short-term variability in detritus does not appear to be a function of neap-spring tidal variability (as observed by Odum and de la Cruz 1967) but may be influenced by the freshwater runoff (Table I; correlations with precipitation, tubidity, and stratification).

Due to the estimated short residence time of Merigomish Harbour water and the high concentration of particulate organic carbon [three times higher than that

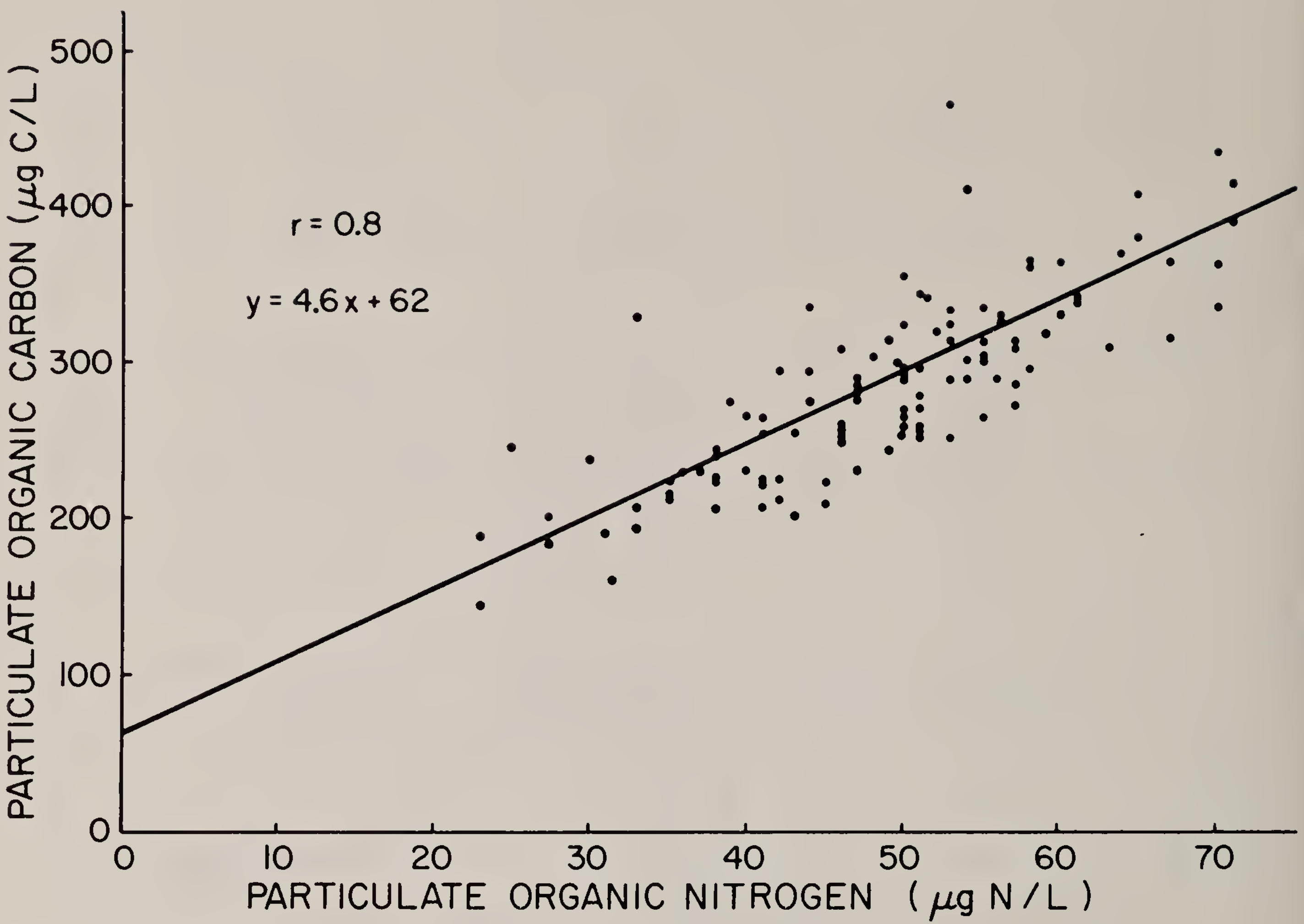

Fig 10 Relationship between particulate organic carbon and nitrogen at Station A during the sampling period.

measured by R. Pocklington (pers. comm., Bedford Institute of Oceanography, Dartmouth) for the Gulf of St. Lawrence] the estuary is an important source of POM to the contiguous offshore waters. This is expected to be true of other salt marsh estuaries along the western border of the Gulf of St. Lawrence.

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OVINE ILL-THRIFT IN NOVA SCOTIA. 8. ANALYSIS OF ISOCYANIDE ANTIBIOTICS PRODUCED BY *TRICHODERMA HAMATUM*[*]

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The isocyanide antibiotics, trichoviridin (I), dermadin (II) and 3-(3-isocyano*cyclo*pent-2-enylidene-)propionic acid (III) can be separated on silica and 1 μg can be detected on chromatograms by spraying them with a dilute solution of nickelous chloride. The metabolites II and III can be determined, with poor precision (±8%) by making use of their ultraviolet absorption at 254 nm. These two metabolites (II and III) can be analysed in crude extracts only after a preliminary purification step. This chromatographic step results in losses of the isocyanide II. Hence, periodically, the chromatographic equipment has to be calibrated and always after a change of column. The optimum weights of each of the isocyanides analysed was in the range 0.2 - 12 μg in about 5 μl of solution. About 0.5% of III in dermadin and about 1% of dermadin in III could be determined with the precision of the method.

Les antibiotiques isocyaniques suivants: trichoviridine (I), dermadin (II) et 3-(isocyano-3 cyclopent-enyldene-2) acide propionic-3 (III) feuvent être séparés sur silice et 1 μg est détectable sur les chromatogrammes après vaporisation d'une solution de chlorure de nickel diluie. Les métabolites II et III peuvent être déterminés par leur absorption ultraviolette à 254 nm, mais avec une faible précision (±8%). L' analyse des métabolites II et III dans les extraits, bruts, nécessite une étape de purification préliminaire. Cette étape chromatographique amène des pertes d'isocyanide II.

C'est pour cette raison que l'equipment chromatographique doit être calibré periodiquement, et spécialement après un changement de colonne. Les poids optimum de chacun des isocyanides analysés variaient de 0.2 a 12 μg dans 5 μl de solution. La precision de la méthode perment de déterminer approximativement 0.5% de III dans la dermadiner et 1% de dermadine dans II.

Introduction

Trichoderma hamatum is an important component of the fungal flora of soils of permanent pasture in Nova Scotia (Brewer and Taylor, 1980). Many isolates of this fungus produce unstable metabolites that inhibit the growth of several genera of bacteria (Brewer and Taylor, 1981). Since these metabolites are soluble in water and are of low molecular weight (Brewer et al., 1979) it is possible that they are translocated by pasture plants and thus ingested by ruminants. They may, therefore play a role in the fermentation changes that occur in the rumen, that are thought to be related to ill-thrift (Brewer et al., 1971). Hitherto only biological assays of these compounds have been available, but with some elucidation of their chemistry (Brewer et al., 1979) it seemed possible that an analytical method based on their physical and chemical properties could be developed. Such a procedure might complement and confirm the results of biological assays. An investigation along these lines is reported in this paper.

Methods

All chemicals were of analytical grade. Petroleum ether had b.p. 30 - 60° and diethyl ether was distilled from ferrous sulphate before use. The isocyanides, trichoviridin (I), dermadin (II), and 3-(3-isocyanocyclopent-2-enylidene-) propionic acid (III) were isolated from fermentations of *Trichoderma hamatum* isolates HLX* 1383, HLX 1388 and HLX 1379-11 as has been described (Brewer et al., 1982). Glass plates coated with silica gel (0.25 mm thick, 60 F-254, Merck) containing a lanthanide fluorescent indicator were used for thin layer chromatography (t.l.c.). Isocyanides were detected on the plates by reflectance short wave (ca. 254 nm) ultraviolet radiation in the cases of II and III, and by spraying the plates with a solution (5 ml) of nickelous chloride (0.01 g) in water (100 ml).

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[*]NRCC No. 20472

Chromatographic Apparatus for Quantitative Analysis

The apparatus consisted of a pump (Waters 6000A) fed with premixed solvent through a 5 μm filter and a teflon line. The solvent was kept at room temperature in contact with the filter for 24 h before use. The teflon line passed through a tight-fitting hole in the screw cap of the solvent reservoir to prevent evaporation of the solvent. During chromatography the cap was partially unscrewed to allow air into the reservoir. The pump delivered solvent to an injection block (Waters, model U6K) and thence to 2 silica gel columns (Merck, either LiChrosorb Si 60 (7 μm), 250 x 3 mm, or LiChrosorb Si 60 (5 μm), 250 x 4.5 mm, or intermediate diameters and particle sizes) in series. The effluent from the second column was led to an ultraviolet detector (Waters, model 440, cell light path 1 cm, $\lambda = 254$ nm) and then to a second detector (DuPont 837) set at 270 nm and finally to a valve which permitted collection of fractions or disposal to waste. The pump, injection block, columns, detectors and collection valve, were connected by stainless steel tubing of 0.023 cm bore. The signal from the 254 nm detector (0-2 v) was used as input on a digital integrator (Waters data module 700) which calculated the area of the envelope above the base line of the changing signal with time.

All weights were measured on an analytical balance (P. Bunge, Hamburg 23, W. Germany) with a precision of ±1 μg. Ultraviolet spectra were measured on a Cary 14 spectrometer.

Procedures

(a) Qualitative analysis—A solution (5 μl) of isocyanide (1-5 μg) in diethyl ether was applied to a t.l.c. plate. The plate was developed with a solution (100 ml) of acetic acid (0.2 ml) in petroleum ether (24.8 ml) and diethyl ether until the solvent front had risen to the top of the silica layer. Standard solutions (2 μl, 10% w/v) of the isocyanides I, II, and III were chromatographed at the same time. The plate was examined under ultraviolet light (254 nm), the absorbing spots were marked, and the plate was then sprayed with nickelous chloride solution. After 5 min at room temperature any brown or black spots were marked and the plates were then heated at 100° for 5 min.

(b) Quantitative analysis of isocyanides II and III—A solution (5 μl) containing 0.5-5 μg of III and/or 1-10 μg of II was injected into the sample loop of the injection block. The loop was swept out by the eluting solvent (acetic acid-petroleum ether-diethyl ether: 1:149:350) pumped at 2 ml min^{-1}. The columns were maintained at 24 ±1°. Each chromatogram required about 11 min; III was eluted at an elution volume of about 10 ml and dermadin at 15 ml.

Replicate chromatograms of all analytical samples were run until the standard deviation of the integrated areas for each isocyanide was less than 10%.

(c) Preparation of samples for chromatography—Samples in aqueous solutions were acidified with phosphoric acid (2N) to pH 4.5. The acidified solution was extracted with diethyl ether (x 4) and the combined ether extracts dried (Na_2SO_4) at

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*Accession number to the culture collection held at this laboratory.

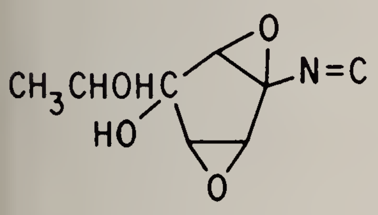
-15°. After 1 h the extracts were filtered at -15°, were allowed to warm to room temperature and diluted to give a final isocyanide concentration of about 2 mg ml^{-1}. The concentration was judged by the size of the spots on the thin layer chromatograms. Samples in organic solvents were diluted with ether to the same concentration judged in the same way.

Samples of pure trichoviridin (I), and dermadin (II) were weighed as standards as has been described (Brewer et al., 1982). Samples of the isocyanide III were too unstable to be weighed. Thus measurements were made on solutions of known volume whose concentration was then determined by evaporation of an aliquot and weighing the residue. It was assumed that no weight gain or loss of the solute occurred during evaporation.

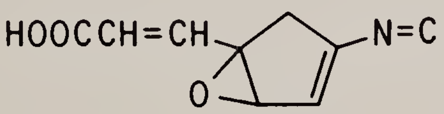
Results

Qualitative analysis of isocyanide metabolites by thin layer chromatography

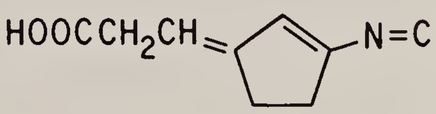
Separation of the 3 principal isocyanide metabolites of *T. hamatum* by chromatography requires a trace of acetic acid in the developing solvent. The minimum concentration was 0.2% since lower quantities resulted in tailing spots. The maximum concentration was about 0.5% because higher levels induced polymerisation of the isocyanides and hence long streaks of brown polymer on the plates. Most commercially prepared plates were satisfactory and lanthanide fluorescent agents did not appear to catalyse polymerisation. However some polymerisation always occurred at the point of application unless the sample was applied to a 2 cm strip of hyflosupercel along one edge of a composite silica plate.



I



II



III

Those metabolites that have the chromophore $-\overset{|}{C}=\overset{|}{C}-N=C$ appear as blue spots on lanthanide-containing plates when the plates are irradiated with short-wave ultraviolet light. The limit of detection of III is about 0.1 μg and of II, about 0.05 μg. The 3 isocyanide metabolites, and indeed the simple isocyanides, cyclohexylisocyanide and benzylisocyanide, polymerise under the catalytic effect of nickelous salts (Nolte et al., 1973) to give brown polymers. Hence they can be detected on t.l.c. plates by spraying the plates with aqueous solutions of nickelous salts. The unsaturated isocyanides (II & III) polymerise instantaneously at room temperature while the other 3 isocyanides polymerise slowly unless the plates are heated to 100°. The lower limit of detection in all cases is about 0.1 μg.

Ultraviolet absorption spectra of isocyanides II and III

The ultraviolet absorption spectra of II and III are shown in Fig 1. The absorption of the latter compound at 270 nm had ε 13630 ± 70 (determinations on 5 samples) but, although the measurement is precise, it is not suitable for analytical purposes because the decomposition/polymerisation products of III also absorb in this region of the spectrum. The value of $\varepsilon_{223\ nm}$ for dermadin was found to be 15200 ± 750 (determinations on 6 samples) but again this was not suitable for direct analysis because of interfering components in mixtures that also absorbed in this region. It was therefore necessary to introduce a purification step into the analytical

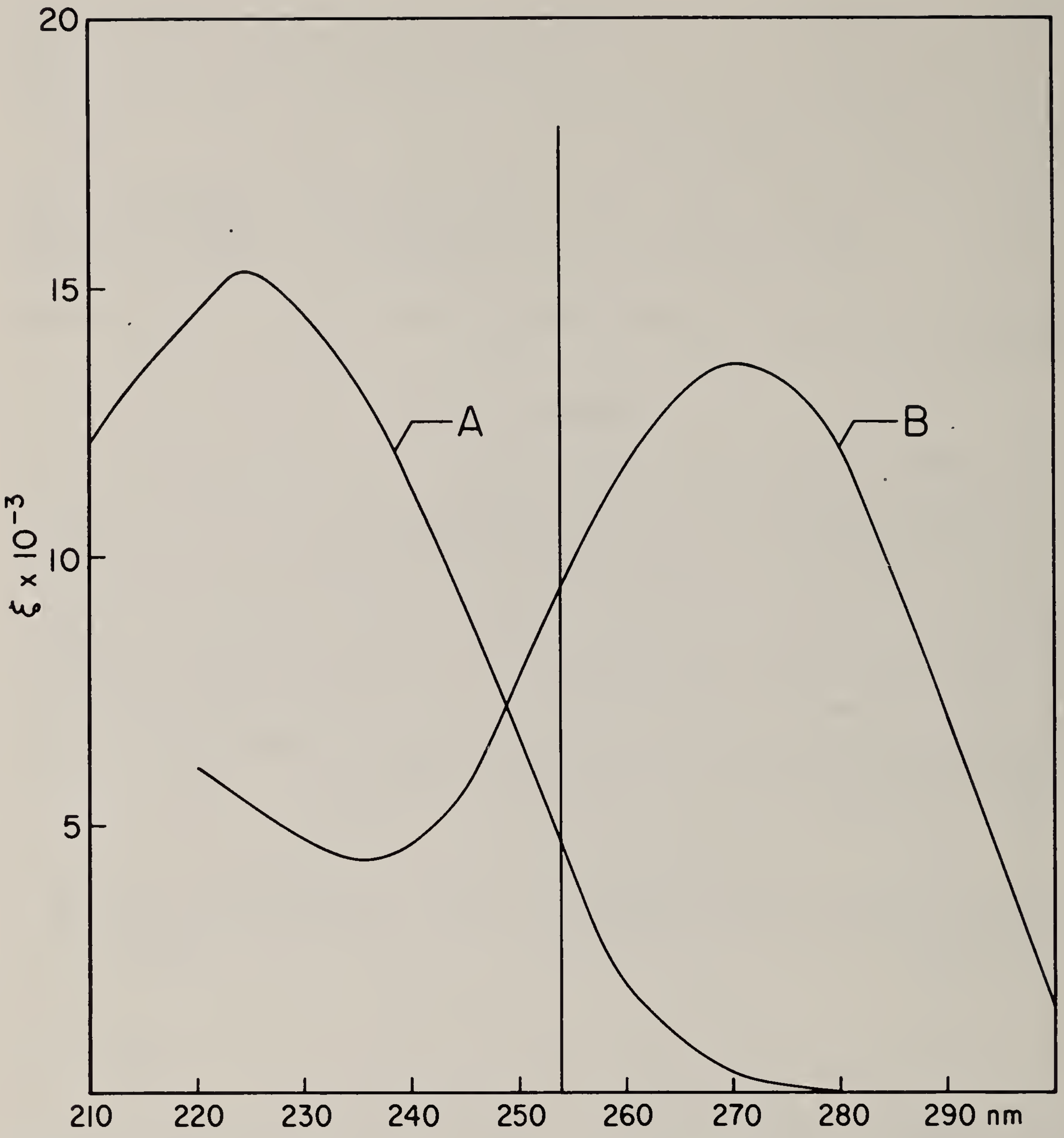


Fig 1 Ultraviolet spectra of A = dermadin (II) and B = 3-(3-isocyano*cyclo*pent-2-enylidene-) propionic acid (III).

procedure. The 2 metabolites could be separated on slicia gel and could be detected in the effluent from a chromatography column using a suitable flow cell. If it is assumed that the detected isocyanide is pure, then its concentration in the cell at an instant of time, can be calculated from its absorption at that time, with the precision indicated. Similarly, the absorption detected during the time when the solute is eluted is proportional to the changing concentration and hence to the weight of solute present. The proportionality constants can be determined by chromatography of known weights of solute. We were unable to determine the absorption of the effluent at 223 nm and at 270 nm when mixtures of the isocyanides were analysed on the same chromatogram because of switching difficulties and attendant base line instabilities. The analyses were therefore carried out by measuring the absorption at 254 nm by the 2 metabolites. The values for $\varepsilon_{254\ nm}$ for II and III were found to be, respectively, 4900 ± 240 and 9430 ± 80 (6 determinations on 4 different samples of each metabolite). The larger error for dermadin is due to the fact that its absorption changes very rapidly with respect to wavelength in this region of the spectrum (Fig 1; e.g. $\varepsilon_{252\ nm}$ 5850, $\varepsilon_{256\ nm}$ 3850), hence accuracy is dependent on the resolution of the spectrometer.

Analysis of Dermadin (II)

(a) Reproducibility of retention volume—The R^v of dermadin, i.e. the volume of solvent pumped through the column between injection of the sample, and the point of maximum absorption in the eluate was, as expected, dependent on the temperature of the column and the weight of silica. Under the experimental conditions used the variation in R^v was less than 2%. Most of the variability was due to minute vapour bubbles in the solvent which affected pumping pressure and hence flow rate. For this reason it was essential to allow freshly prepared solvent to stand at the same temperature as the pump for at least 24 h before use.

(b) Reproducibility of detector response—A column load of dermadin between 0.1 and 10 μg was easily detected in the eluant. For reasons that will be discussed, loads of about 0.5 μg were used to determine the reproducibility of the system. A series of 27 runs gave a mean value for the integrated areas corresponding to unit injection volume of 1510 ± 126 (range 1123-1762), i.e. an error of ± 8%. Better results were obtained with injection volumes of 4 and 5 μl (Table 1). The F value for the variances of 4 μl and 5 μl injections was significant ($P \leqslant 0.05$). Thus a small decrease in the volume injected increased the variability. Nonetheless, the difference in the mean integrated areas was significant ($P \leqslant 0.001$) and they were in the proportion 4:5.

Table I Comparison of the reproducibility of integrator response in chromatographic analysis of dermadin solutions in diethyl ether.

Wt. of dermadin on column	Injected Volume	No. of Samples	Integrated areas of signal with respect to time in arbitary units			
(μg)	(μl)		Mean	SD	Maximum	Minimum
2.185	5	7	7537	313	7776	6970
1.748	4	8	6093	855	7048	4491
0.435	5	8	1511	74	1612	1417

(c) Effect of load of dermadin on the column—The minimum weight of dermadin that could be detected in the effluent was 0.008 μg. At loads ten times greater the integrated areas were 229 ± 60. By increasing the load by a further factor of 5 much better reproducibility was obtained (Table I). Similar reproductibilities were achieved by using column loads up to and including 11 μg, but higher concentrations, still well within the range of the detector, gave results whose variance increased with load.

(d) Recovery in column effluents—The weight of dermadin in the effluent from the column was determined by collecting the fraction, and determining the absorption of the solution of known volume at 223 nm. Losses of dermadin occurred on all columns and depended on the size of the column and the dimensions of the silica particles. Thus on a column of dimensions 25 x 0.3 cm a recovery of 98% was obtained, but when the size of the column was increased to 25 x 0.45 cm (which greatly improved separation—see below) only 76% was recovered. The effect of particle size was smaller, recoveries being about 2% lower when the particle size was ~5 μm, as compared to ~10 μm. Thus all columns had to be calibrated at regular intervals and especially when new.

(e) Relationship between integrated areas and weight of dermadin in a sample—Eight samples of dermadin, isolated from different *T. hamatum* fermentations (Brewer et *al.*, 1982) and purified by chromatography to constant specific optical rotation ([α_D^{24} + 138°) and absorption at 223 nm (see above) were weighed in the quantities shown in Table 2. The weights injected onto the column and the mean values for the areas obtained in quadruplicated runs are also given in Table 2. These data were then used to calculate the least squares regression:

$$\text{Wt. of dermadin in } \mu g = 0.21 + 2.543 \times 10^{-4} \times \text{integrated area},$$

with $R^2 = 0.987$ and $SE_{est.}$ 0.044μg. The percentage error of predicted weight is smaller for the mid-range of weights (Table II).

Table II Relationship of integrated areas of detector response to known weights of dermadin injected on a silica gel column (20 x 0.45 cm) of particle size ca. 5 μm

Weight of Dermadin sample (mg)	on column (μg)	Integrated area (arbitrary units)	Calculated weight of dermadin (μg)	Weight - Calc. weight (μg)	% Diff.
0.017	0.085	239	0.27	-0.19	-69
0.087	0.437	1511	0.595	-0.16	-26
0.907	0.907	3025	0.980	-0.073	-7.4
0.437	2.185	7531	2.126	0.059	2.7
1.309	2.618	9539	2.636	-0.018	-0.7
2.100	4.200	16582	4.428	-0.228	-5.1
3.186	6.372	20450	5.410	0.961	17.8
2.212	11.060	44055	11.410	-0.35	-3.1

Analysis of 3-(3-isocyanocyclopent-2-enylidene-) propionic acid (III)

(a) Reproducibility of retention volume—Under the conditions used for chromatography of dermadin, the isocyanide III had a smaller R_V. It was therefore eluted in a band that was less dispersed and hence the variability of the R_V from one chromatogram to another was smaller—±1.5%.

(b) Determination of optimum conditions for analysis—The value of ε at 254 nm for the isocyanide III is 1.9 times greater than that of dermadin at this wave-length. In addition the accuracy of the determination is greater (±1% compared to ±5%). Since the retention volume was also lower, and hence the time of contact of the antibiotic with the silica shorter, polymerisation and/or decomposition on the column might be expected to be less than that of dermadin. However it was found that the mean integrated area for 26 analyses of 1 μg of the pure antibiotic in 5 μl of ether was 7360±624 (range 8731-6143); the same error (8%) as found in the analysis of dermadin. Analysis of data obtained by injection of 3, 4 and 5 μl of the same solution of the isocyanide III showed, as with dermadin, that there was a statistically significant difference in response to each volume injected, but there was no significant differences in the F values of the variances. Recoveries of III from the column were independent of column dimensions and the particle size of the silica. Within the accuracy of the measurements recoveries were 100%.

(c) Relationship between integrated areas and weight of III in a sample—Five samples of III isolated from different fermentations of *T. hamatum* were purified by chromatography to constant ε at 270 nm. The five solutions were adjusted to 50 ml. Samples (2 ml) were then evaporated to dryness to determine the weight of the residue and other samples (5 μl) were analyzed chromatographically. All chromatograms were run in quadruplicate and the data obtained were used to

calculate a least-squares regression:

wt. of isocyanide III in $\mu g = 0.013 + 1.33 \times 10^{-4} \times$ integrated area,
with $R^2 = 0.994$ and $SE_{est} = 0.041\ \mu g$.

Analysis of mixture of isocyanides II and III

(a) Factors determining efficiency of separation—In the early stages of this work stainless steel columns 20 x 0.3 cm, packed with silica suitable for thin layer chromatography, were used. These columns completely separated mixtures of the two isocyanides except for mixtures of ~5% dermadin in III, where the dermadin peak was obscured in the tail of III. Subsequently, better separations were obtained on commercially packed columns and it appeared (no measurements were done) that columns with the smallest particle size (3 μm) were most efficient. Separation also depends on the size of the column, with 20 x 0.45 cm being optimal. Such columns give base-line separations of 1% of III in dermadin and *vice versa*. Larger columns are undesirable because of loss of dermadin. Separation also depends on the ratio of diethyl ether and petroleum ether. The best ratio had to be found by trial and error for each column, balancing complete separation against minimum residence time of the isocyanides on the column. In general decreasing the proportion of ether improves the separation.

(b) Limits of detection in mixtures of II and III—The limit of detection of III in dermadin was 0.3%. Thus in a mixture of 0.016 μg of III and 5.5 μg of II the peak of III was detected and integrated in 70% of the chromatograms. At twice the column load the chance of detection and integration of III increased to 90%, whilst at half the column load it declined to 25%. It was advantageous to confirm the presence of III in samples of dermadin by using a second detector set at 270 nm downstream from the 254 nm detector. The 270 nm peak of III (Fig 1) is quite sharp and the absorption of dermadin at 270 nm (ε 420) low and thus it is possible to detect about 0.01 μg of III in a mixture containing about 7 μg of dermadin.

The limit of detection of dermadin in samples of III was 1%. In a mixture of 0.05 μg of II and 5μg of III the dermadin peak was detected in 100% of the chromatograms and integrated in 95%. Reduction of the column load by 50% did not change the detection efficiency but reduced the number of times the peak was integrated to 65%.

Discussion

A simple spot test using a nickel salt detects isocyanides in a solution. This test was used to detect isocyanides on chromatograms and gave a rough indication of the quantity present. Unfortunately, we were unable to use the polymerisation reaction for quantitative colorimetric determination of isocyanides because the absorption of the brown polymers formed did not obey Beer's Law.

The concentration of dermadin (II) and the unsaturated isocyanide (III) in solution could be accurately determined by their ultraviolet absorption, but only when they were pure. The chromatography required for their separation and the need to use their absorption at a common wavelength, reduced the precision of the measurements to ± 8%. It is probable that this imprecision could be reduced by using dual detectors and integrators, but such a development would be expensive. Recent reports (Ott and Formcek, 1981; Schmidt and Dietsche, 1981) of the reactions of isocyanides with specific reagents to give derivatives having characteristic absorption, suggest that such an alternative approach might be more profitable than elaborate instrumentation.

The biological activity of these isocyanides varies greatly and it is therefore difficult to compare the sensitivity of the bioassay with chromatographic analyses. About 5 μg of the isocyanide III can be detected by a disc assay using *Micrococcus luteus* (HLX 701) as the test organism (Brewer et al., 1982). Although chromatographic procedures are at least an order of magnitude more sensitive, they are no substitute for bioassay, because isocyanides of low biological activity with chromatographic properties similar to III may be present.

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NOTES ON ADULT LUMPFISH CYCLOPTERUS LUMPUS L. FROM THE BAY OF FUNDY

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Length, wet weight and gonad weight were measured on 33 male and 21 female lumpfish taken in a weir in the Upper Bay of Fundy in June 1980. All fish were mature. Testes represented about 3% (±0.9 S.D.) of total body weight. Estimates of female fecundity ranged from 54,000 to 159,000, the ovaries being 26% of total body weight. Considerations of ovary weight: body weight relations suggested that 12 of the 21 females had already shed part of their egg complement. All specimens were infected by the cod gill parasite *Lernaeocera branchialis* (Copepoda).

Des measures de la longueur, du poids humide et du poids des gonads ont été effectuées sur 33 mâles et 21 femelles "poules d'eau" capturées, en juin 1980, dans un barrage situé dans la partie supérieure de la Baie de Fundy. Tous les poissons avaient atteint leur maturité. Les testicules représentent approximativement 3% (±0.9). du poids total corporel. La fecondite des femelles varie de 54,000 a 159,000, les ovaries comptant pour 26% de poids corporel total. L'étude du rapport poids des ovaries: poids corporel resemble indiquer que 12 des 21 femelles avaient déjà perdu une parti de leur masse d'ouefs. Tous les individus étaient infestés par le parasite des branchier de la morue *Lernaeocera branchiales* (Copepoda).

Introduction

The lumpfish, *Cyclopterus lumpus* L., is a large, but uncommon bottom-dwelling fish of coastal waters that has occasioned little study in North America. It is widely distributed, from Hudson Bay (Vladykov 1933) to Chesapeake Bay (Leim and Scott 1966) on the western side of the Atlantic. It is most frequently encountered during the shoreward spawning migration that occurs in early summer (Cornish 1907; Leim 1960; McKenzie 1939, 1959; Witman 1978; Collins 1976, 1979), but also occasionally collected during deeper water fishing operations (Cox and Anderson 1922; Collins 1976). Following hatching, the first year of life is spent mainly within the top 1 m of coastal waters and although immature individuals have been found in association with floating seaweed, the next 4 to 7 years are spent mostly on or near the bottom at depths $<$400 m (Cox and Anderson 1922).

Early attempts to promote the lumpfish as a food fish in Canada were unsuccessful (Anon, 1929). It is considered a delicacy, however, in northern Europe, and most of the 1968 world catch of 3,000 tonnes was taken from the north-east Atlantic (Rounsefell 1975).

The present study was carried out as part of a broad investigation of the occurrence and role of fishes inhabiting the upper Bay of Fundy and Minas Basin.

Methods

Fifty-four adult lumpfish (33 ♂♂, 21 ♀♀) were obtained from a fish weir near Baxter's Harbour, N.S. in the upper Bay of Fundy (45° 15′ N, 64° 28′ W) during the first two weeks of June 1980. These were promptly wrapped in plastic bags, frozen and stored for use. After thawing, each individual was weighed (fresh weight—FW) to the nearest 0.01 kg and length was recorded to the nearest 1 mm. Gonads were removed *in toto* and weighed to the nearest 0.1 g. Groups of 150-300 eggs were counted and weighed, and fecundity of each female estimated by dividing total ovary weight by the mean egg weight derived from several egg groups.

Gut contents were examined to determine if any of the spawning fish had been feeding, and the gills and buccal cavity were inspected for parasites.

Results

All fish examined were mature, and had either spawned recently or were about to spawn. Males exhibited nuptial colours varying from pink to a deep red, the colours being most intensely developed around the ventral sucker. Since these colours apparently fade shortly after spawning is completed (Cox and Anderson 1922) it may be assumed that the spawning season extends through the first half of June in the Bay of Fundy.

Male lengths ranged from 24 to 38 cm, and thus hardly overlapped the female range of 37-45 cm. In males, fresh weight was highly correlated with lengths and a functional regression provided a satisfactory fit to the data (Fig 1). For the 21 females, however, the correlation was much poorer because of wide variations in body weight at any given length; the best fit functional regression (Fig 1) therefore has little predictive value. For both sexes it is probable that a curvilinear relationship such as that obtained for juvenile lumpfish $<$ 5 cm L (unpublished data), may be applicable to adults also, but our data are inadequate to determine this.

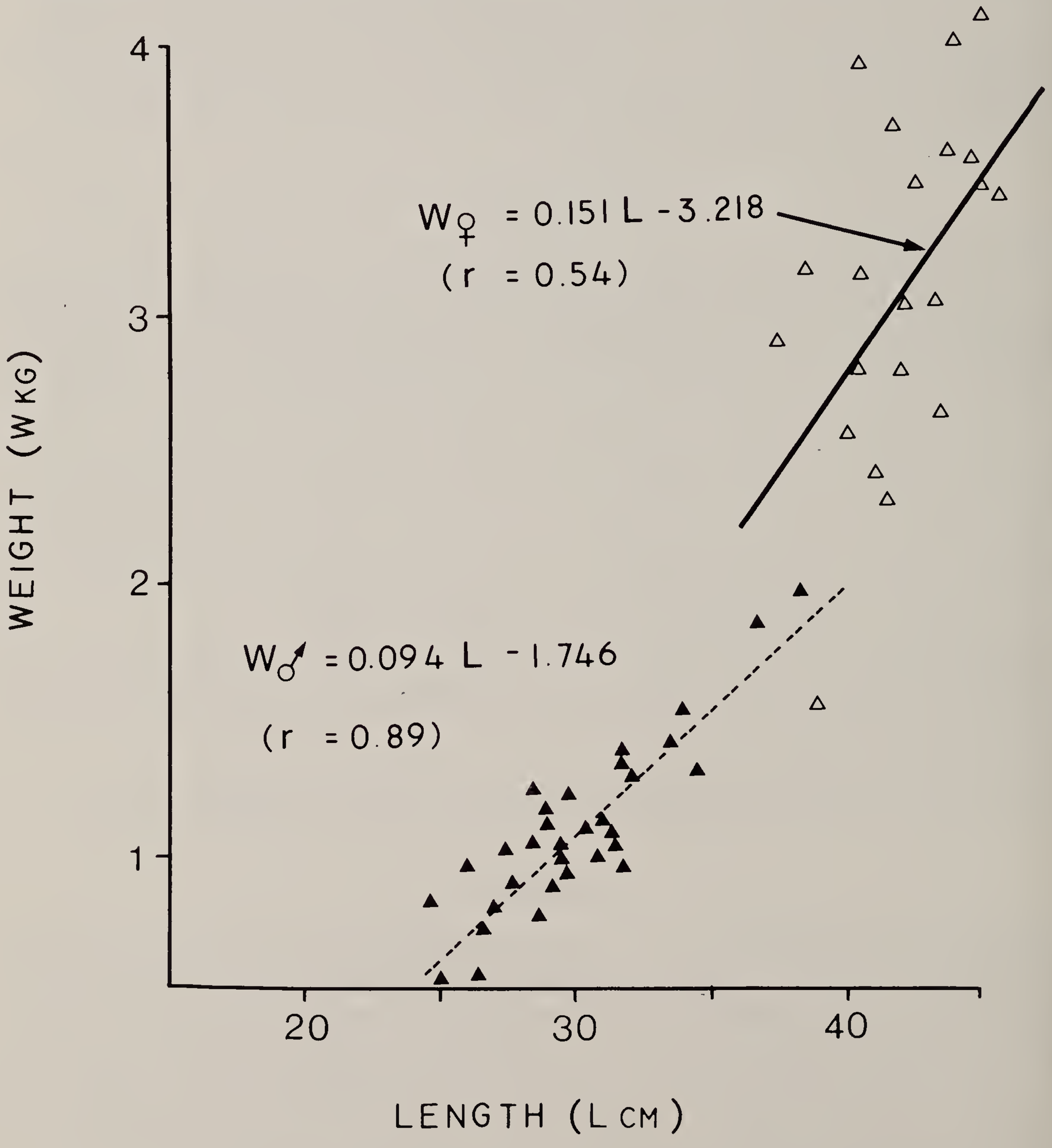

Fig 1 Length-weight relationships in lumpfish from the Bay of Fundy.

Testis weight in males was moderately well correlated with body weight (Fig 2), representing ± 5% of fresh weight (mean 3.10%±0.93 S.D.) for all sizes examined. With 3 possible exceptions (evident on Fig 2) we are confident that the individuals had not spawned. Ovary weight in the 21 females, however, ranged very widely, averaging 17.96% (± 5.78) of total body weight. Inspection of the data suggested that the sample could be divided into 2 groups (Fig 3): in one group of 9 individuals ovary weight represented $>$20% of FW (mean 24.12 ±1.84%) whereas in the remainder ovaries were much lighter (mean 13.24 ±2.02%). Each group is apparently homogeneous, showing high correlations between ovary weight and body weight and similar regression relations (Fig 3).

Estimates of fecundity showed a similar but incomplete separation of the 2 groups. Egg numbers ranged from 80,000 to 159,000 in the group with larger ovary weights, and showed a fair correlation with FW (Fig 4). With one exception, egg counts were distinctly lower in the second group, generally $<$100,000. These results are conformable with Ehrenbaum's observation that the eggs are laid intermittently in 2 or 3 batches over 8-14 days (cf. Cox and Anderson 1922, p. 11). The difference between the 2 regression lines (Fig 4) is equivalent to ca. 40,000 eggs: approximately one third of the mean egg count for the unspawned females (125,000). It may be assumed, therefore, that the lower group consists of fish that have already spawned at least once.

Twenty-five of the specimens examined were completely devoid of food. Only 8 had material in the stomach, the others having food remnants only in the intestine. Identifiable fragments consisted largely of benthic polychaetes, one *Hyperia galba* (Amphipoda) and remnants of small pelecypods.

All specimens examined carried copepodite stages I-IV of the gill parasite *Lernaeocera branchialis.* In some instances, particularly males, infestations were heavy enough to cause notable damage to the gill tissue (cf. Templeman *et al.* 1976).

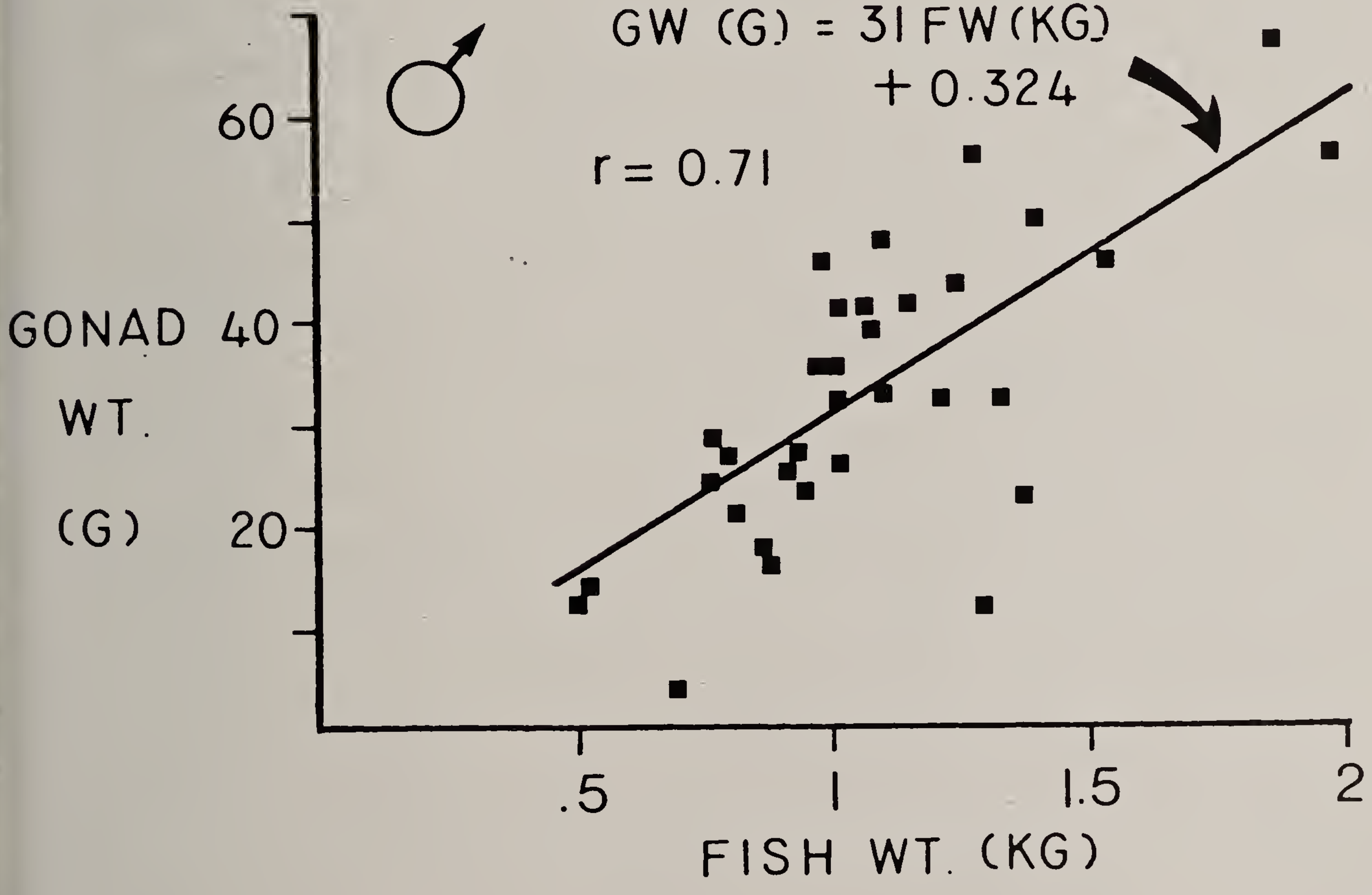

Fig 2 Testis weight-fresh weight relationship in adult male lumpfish from the Bay of Fundy.

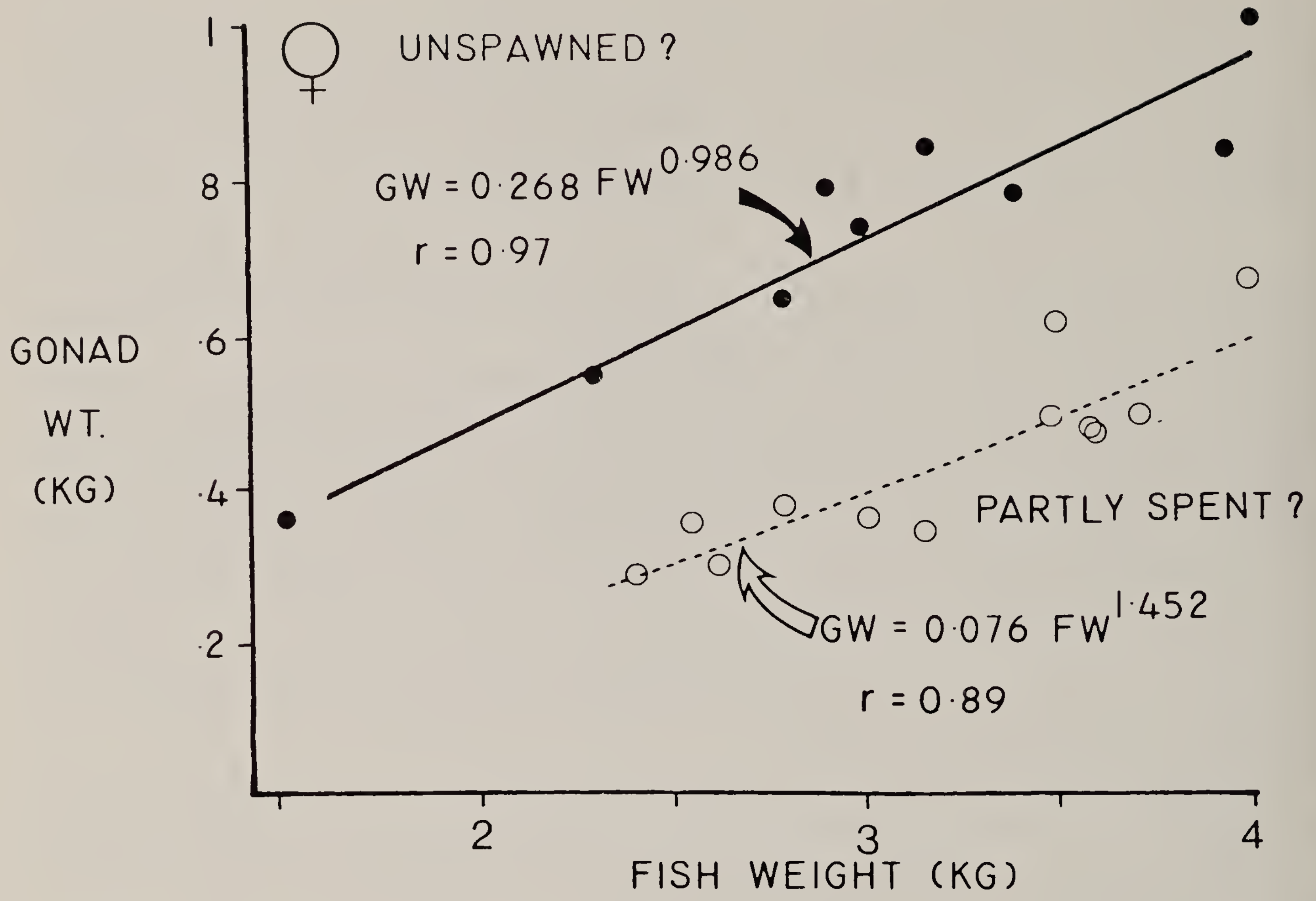

Fig 3 Ovary weight-fresh weight relationship in adult female lumpfish from the Bay of Fundy.

Discussion

The results reported here are quite conformable with the fragmentary knowledge of this species summarised in Cox and Anderson (1922) and Leim and Scott (1966). Spawning apparently takes place along the whole Nova Scotia shore on the east side of the Bay of Fundy, and ripe adults have also been taken by groundfish draggers in Minas Basin (Bousfield and Leim 1960). The scarcity of suitable rocky habitat within Minas Basin, however, probably limits successful spawning of this species. Cox and Anderson (1922) noted that spawning adults were not encountered so far up the western (New Brunswick) side of the Bay of Fundy.

The present data on length-weight relationships need to be considerably augmented. Our sample included sizes up to the largest commonly recorded from Canadian waters (46 cm—McKenzie 1959; Leim 1960) although exceptionally large individuals ⩽60 cm and weighing 9.5 kg have occasionally been encountered (Leim and Scott 1966). Extrapolation from our length-weight regression equations to these larger lengths results in estimates well below the recorded weights of such specimens.

Fecundity estimates from our data are similar to other records. The apparent division of the females into unspawned and partially spawned individuals supports the observation that spawning is intermittent, with two or three separate events taking place. Since males remain to guard the nest site, they are less likely to become trapped in an intertidal weir once spawning has commenced. We therefore assume that our sample consisted only of unspawned males, and that the average 3% FW of the testes is a measure of the normal reproductive effort of males in this species.

Although not used for human food in North America (cf. Collins 1979), the lumpfish is nevertheless a species of interest and significance in the Bay of Fundy. Its

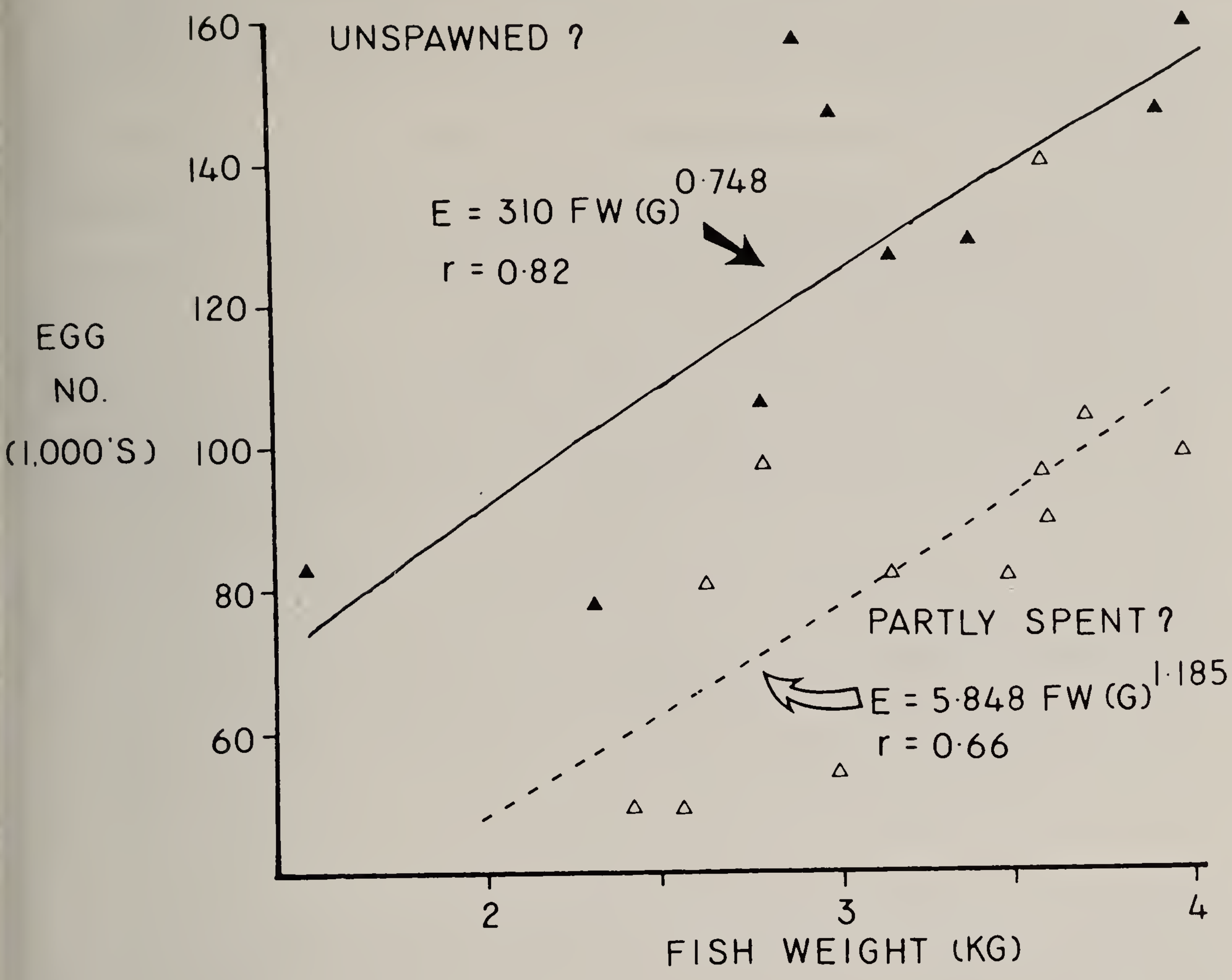

Fig 4 Fecundity of presumed unspawned and partially spawned female lumpfish from the Bay of Fundy.

prevalence at times is a source of difficulty for weir operators. It is preyed upon by seals, and is the only known intermediate host for the important cod parasite *Lernaeocera* in the northeastern Atlantic. Finally, its juvenile stage is a notable member of the near-surface plankton of the Bay of Fundy.

Acknowledgements

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LEAD AND ZINC CONTAMINATION OF ROADSIDE SOIL AND VEGETATION IN HALIFAX, NOVA SCOTIA

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Lead and Zinc concentrations were measured in roadside soils and vegetation (*Poa pratensis*) in the city of Halifax, Nova Scotia, and are related to: i) traffic density—soils and vegetation had higher concentrations near high volume roads than near low volume roads; ii) distance from the roadedge—concentrations decreased exponentially with increasing distance; and iii) soil depth—concentrations decreased with increasing depth.

Des mesures de la concentration en plomb et en zinc ont été effectuées sur les sols et la végétation (*Poa pratensis*) de la bordure des routes de la ville d'Halifax, Nouvelle-Ecosse. Ces concentrations sont relieés à: i) la densite de la circulation—les sols et la végétation situeés près des routes à grande circulation avaient des concentrations plus élevées que celles des sols et de la végétation situeés aux abords des routes à faible circulation; ii) la distance de la marge de la route—les concentrations décroissent, d'une facon exponentielle, avec une augmentation de la distance; iii) la profondeur du sol—les concentrations décroissent avec une augmentation de la profondeure.

Introduction

In 1923, lead was first introduced as a gasoline additive in the form of tetraethyl lead (TEL: $Pb(CH_2CH_3)_4$). TEL concentrates combustion processes in gasoline engines, allowing an increase in the compression ratio without the risk of knocking. The use of TEL creates a higher octane rating in gasoline and, hence, improved fuel economy (Phillips 1973). During the post-World War II period, leaded gasoline was introduced into most developed countries (Hutchinson 1973a). The use of leaded gasoline in the transportation sector, especially in automobiles, produces an increase in atmospheric lead concentrations to the extent that automobile lead emissions in the United States during 1974 were the major source of lead (60%) to the atmosphere (Nriagu 1978). The 1970 estimated world use of tetraethyl lead was 3.2×10^5 tonnes (Stubbs 1973). Alkyl leads are extremely toxic, volatile, and unstable, and they are human health hazards at their sites of production (Barry 1978). However, the lead emitted from automobiles and to a lesser extent planes, trains, etc., is in the form of lead halides (Anonymous 1973a). These are wind-dispersed in the environment according to particle size, and they amounted to 267×10^3 tonnes lead/yr globally during 1974-75 (Nriagu 1978). Total emissions of lead to the atmosphere in Canada were 21,400 tonnes in 1970, of which 66% originated from automobile exhaust (Anonymous 1973c).

Zinc compounds such as zinc oxide, and zinc dimethyl or diethyl carbamate are used in the vulcanization of rubber. As a consequence, zinc is emitted by the erosion of automobile tires. It was estimated that during 1972, 800 tonnes of zinc were released into the Canadian environment from tire erosion (Anonymous 1973b). Zinc is also found in lubricating oils as an additive, for example as zinc dithiophosphate (Lagerwerff and Specht 1970).

Since the early 1960's there have been numerous reports concerned with metal contamination, especially lead and zinc, of air, biota, and soils near roadways (Cannon and Bowles 1962; Warren et al. 1966; Lagerwerff and Specht 1970;

Creason et al. 1971; Page et al. 1971; Hutchinson 1972; Ward et al. 1975, 1977; Wheeler and Rolfe 1979; Fergusson et al. 1980; Flanagan et al. 1980; Muskett and Jones 1980, 1981; Ratcliff and Beeby 1980; Wade et al. 1980; Agrawal et al 1981; Chimiel and Harrison 1981; Gulson et al. 1981; Harrison et al. 1981; Miragaya et al. 1981).

Automobile lead emissions are a relatively local pollution source, occurring along roads with high traffic volumes. Rush hour traffic can increase the lead concentration in air by 100,000 fold (Peterson 1978). Similarly, Muskett and Jones (1980) measured air concentrations of lead, cadmium, and nickel continuously over a ten month period, at various distances from a heavily travelled road (40,000 Average Daily Traffic—ADT) in West London. All three metals were found to be most highly concentrated within 10 m of the road, and they were inversely correlated with distance.

In 1970, Lagerwerff and Specht demonstrated that cadmium, nickel, lead, and zinc concentrations decreased with increasing soil depth. They noted that their highest lead value in surface soils (540 μg/g) was by no means extreme, as they had previously measured 2,400 μg/g lead in soils next to a California highway.

Ward et al. (1977) measured cadmium, chromium, copper, lead, nickel and zinc in soils and pasture species along a major motorway in New Zealand. All of the elements were present at elevated levels beside the road, and were significantly correlated with traffic density. Mean concentrations (μg/g dry weight) of lead and zinc in surface soils and vegetation from 17 interchanges, grouped according to traffic density, are shown in Table I. Ward et al. (1977) also showed that elemental concentrations of lead and zinc decreased with depth in the soil profile, and that this decrease was most apparent at the high traffic density sites.

Other studies have described lead contamination of roadside vegetation. Cannon and Bowles (1962) demonstrated that crops growing close to highways in the United States had lead contents that were four to twenty times higher than background samples. For example, pasture grass sampled next to major intersections in Denver, Colorado contained 3000 μg/g lead compared with 50 μg/g at a distance of 150 m from the road. Warren et al. (1966) showed that the stems and needles of coniferous trees growing close to a major highway in Stanley Park, Vancouver, had elevated lead concentrations ranging from 110-2000 μg/g. Normal background vegetation lead concentrations are generally less than 5 μg/g (Hutchinson 1972; Ward et al. 1975; Peterson 1978).

Page et al. (1971) reported lead data for 27 varieties of consumer crops growing adjacent to major highways (22,000-175,000 ADT) in southern California. The

Table I Relationships between average daily traffic (ADT) and surface concentrations (μg/g d.w.) of lead and zinc in soils, and lead in vegetation. After Ward et al. (1977)

ADT	SOILS		VEGETATION
	Lead	Zinc	Lead
50,000	2200	480	350
40,000-50,000	1650	250	320
20,000-39,000	1250	180	270
10,000-19,000	780	130	140
Background	14	64	5

amount of lead in and on the plants was shown to be, "influenced by (a) distance from the highway, (b) extent of surface exposed, (c) nature of the collecting surface, (d) duration of exposure, (e) motor vehicle traffic density, and (f) direction of prevailing winds". They concluded that aerial deposition was principally responsible for the high lead accumulation by the crops next to the highways. Absorption of lead from the contaminated soils was felt to be of minor significance.

Hutchinson (1972) analyzed herbarium samples of tree foliage collected from downtown Toronto during the past 100 years. Lead levels in basswood (*Tilia*) were 20-40 μg/g before 1900, but increased to 90 μg/g by 1960. Hutchinson noted that the main increase in lead levels occurred during the 1940's and 1950's, coinciding with an increase in the number of automobiles and the use of tetraethyl lead. His results for Oak (*Quercus*) and Pine (*Pinus*) were similar.

Halifax (1981 population 114,600), the capital of Nova Scotia, is located on Canada's eastern seaboard. It is a major urban center which, to date, has not been studied with regard to roadside effects of automobile-derived lead and zinc. The present paper reports the results of a study done in Halifax. The main objective was to study the effect of traffic density and distance from the roadedge on soil and vegetation concentrations of lead and zinc.

Materials and Methods

Three roadways within the city limits of Halifax and one roadway in a suburban area were chosen for sampling based on their traffic densities (ADT data were obtained from the Halifax Engineering and Works Department):

City Roads	—Macdonald Street	3,000 ADT
	North Park Street	16,000 ADT
	Armdale Rotary	50,000 ADT
Suburban Roadway	—Cole Harbour Road	18,000 ADT

A 100 m-transect running perpendicular to each road was sampled at distances of 0, 1, 5, 15, 30, 50, and 100m. Three above-ground collections of grass (*Poa pratensis*) were made at each site, and were later pooled. The grass was dried at 65°C for 48 h and then ground in a Wiley Mill (the samples were not washed prior to processing). The ground material was redried and subsamples of ca. 0.5 g were placed in 50 ml acid-washed digestion tubes. The plant material was predigested in 5 ml of concentrated nitric acid for 2 h. The digestions were then completed over a hotplate at 100°C, vacuum-filtered, and then diluted to 20 ml with distilled-deionized water. All digests were stored in plastic vials until later analysis.

Three cores of mineral soil were extracted at each site using a 2.0 cm diameter cylindrical sampler. Each core was subsequently divided into 0-2 cm and 2-4 cm sections. The three 0-2 cm and 2-4 cm sections collected at each site were then pooled. The soils were dried at 65°C for 48 h and were then sieved through a 2 mm mesh. The soils were redried and subsamples of ca. 0.5 g were placed in 50 ml acid-washed digestion tubes. These were then digested in the same manner as described for the grass.

Background grass (*Poa pratensis*) and soils were collected from a rural pasture location (Lantz, Nova Scotia) at a distance of approximately one km from the nearest road. These samples were prepared in the same manner as described for grass and soils above.

Lead and zinc concentrations were determined using a Perkin Elmer 2380 Atomic Absorption Spectrophotometer. The following spectral lines were monitored: lead—238.3 nm; zinc—213.9 nm. Standard orchard leaves (U.S. Department of Commerce, Reference Material Number 1571) and sewage sludge (sam-

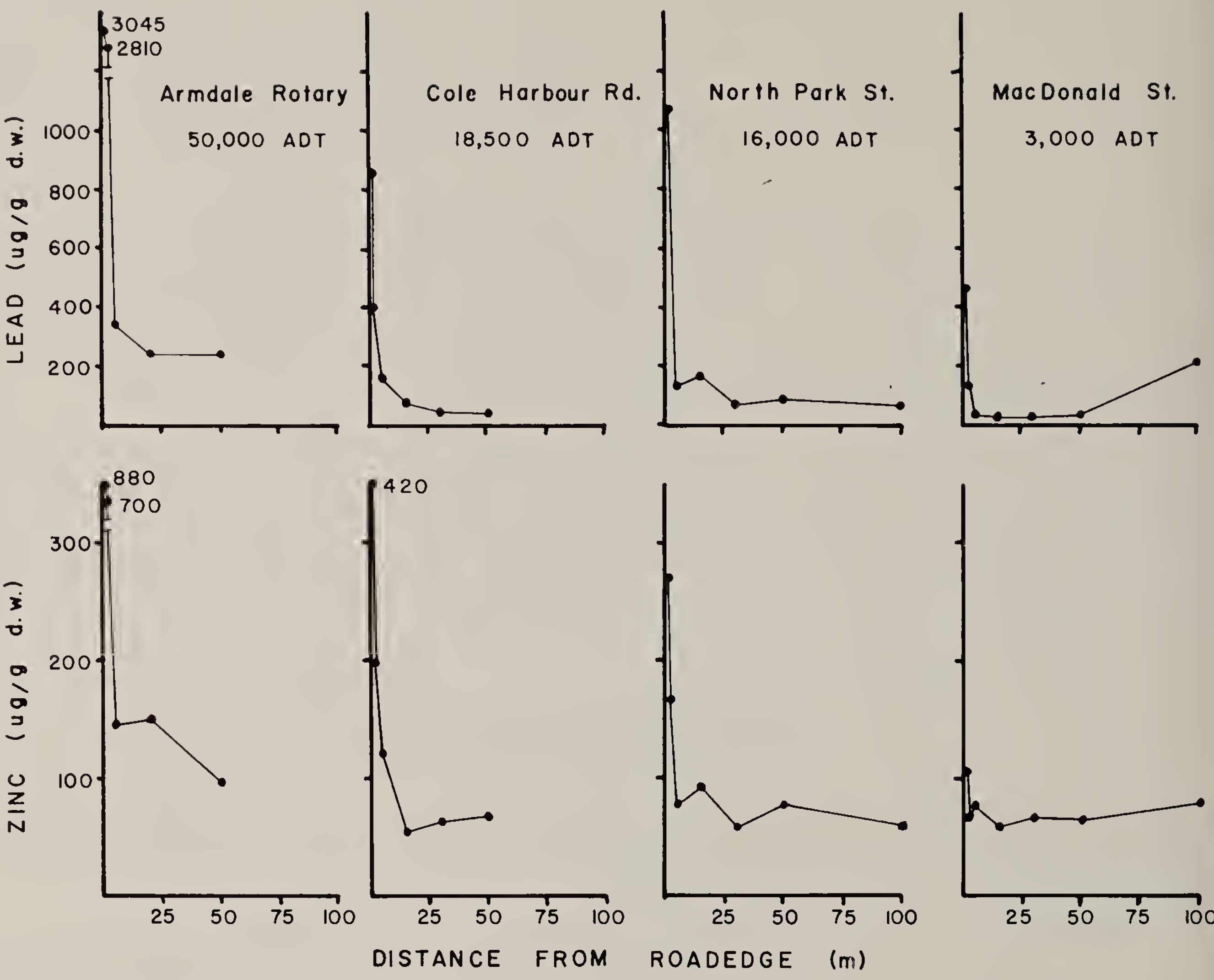

Fig 1 Lead and zinc concentrations (µg/g dry weight) in soils (0-2 cm) at various distances (m) from four streets in Halifax, Nova Scotia study area. ADT data indicated.

Table II Results of Analysis of Standard Reference Material

Reference Material	µg/g Lead		µg/g Zinc	
Standard orchard leaves*	42	(45)	31	(25)
Sewage Sludge A**	92	(101)	879	(735)
Sewage Sludge F**	607	(557)	1084	(927)

( ) certified value
* US Dept. Commerce Ref. Material 1571
** Environment Canada, Wastewater Tech. Center, Burlington, Ontario.

ples A and F, Environment Canada, Wastewater Technology Center, Burlington, Ontario) were analyzed as a check on accuracy.

Results and Discussion

The results of the lead and zinc analyses in roadside grass and soils (0-2 cm) are presented in Figures 1 and 2. Each concentration is the mean of three replicate samples, and is expressed as µg/g dry weight. Table II shows the results of the standard reference materials that were analyzed as a check on accuracy. The results indicate accuracy of ±10%.

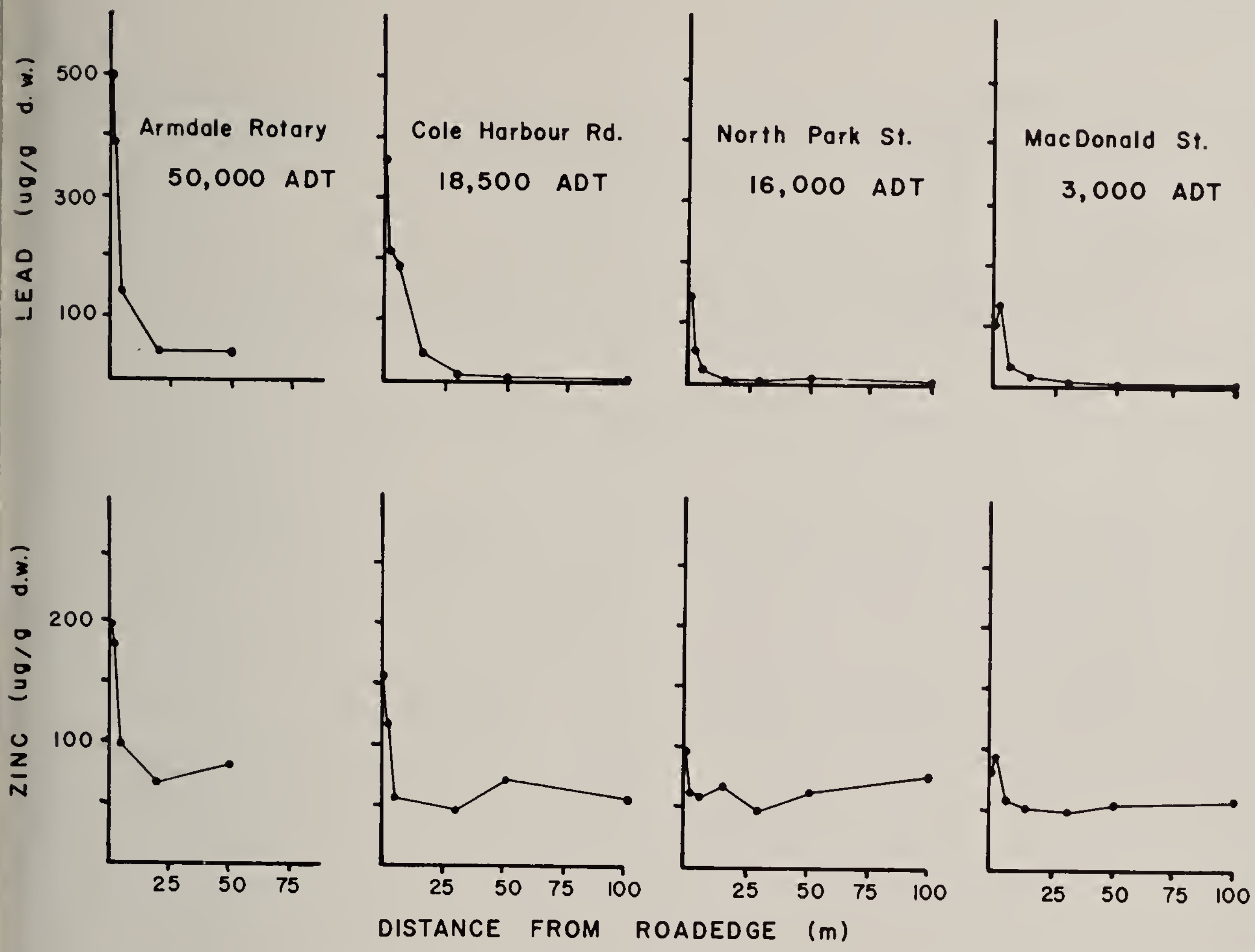

Fig 2 Lead and zinc concentrations (μg/g dry weight) in *Poa pratensis* at various distances (m) from four streets in Halifax, Nova Scotia study area. ADT data indicated.

There is an obvious relationship between metal concentration and traffic density. Macdonald Street (with a 3,000 ADT) consistently had the lowest lead and zinc concentrations in grass and soils near the roadedge. Concentrations increased from North Park Street (16,000 ADT), to Cole Harbour Road (18,500 ADT), and reached the highest concentrations at the Armdale Rotary (50,000 ADT). The range in concentrations measured at the curbside (0 m) were as follows: grass lead 140-500 μg/g; grass zinc 90-200 μg/g; soil lead 470-3,045 μg/g; soil zinc 110-880 μg/g. These compare with background rural values of $<$1 and 97 μg/g for grass, and 14 and 66 μg/g for soils. Thus, the data for Halifax are consistent with traffic density relationships reported for other major urban centers (Hutchinson 1972; Ward et al. 1977; Wheeler and Rolfe 1979; Fergusson et al. 1980).

The lead and zinc concentrations in the grass and soil decrease in a roughly exponential fashion with increasing distance from the road. This relationship existed at each location, with the exception of the grass sampled at Macdonald Street. Here the zinc and lead concentrations in the grass were higher at 1 m than at 0 m. However, the concentrations decreased exponentially from 1 to 100 m.

At all locations the lead and zinc concentrations in grass and soils were highest within 30 m of the road. Beyond 30 m the concentrations are comparable to the background levels. However, the grass samples beyond 30 m were at or below the detection limit for lead (1 μg/g), except at the Armdale Rotary. The background grass samples collected from Lantz were also below the detection limit for lead. Other studies have shown that a relationship exists between distance and metal concentration, and that background concentrations of lead and zinc in soils and vegetation are reached at distances from 15 to 100 m from the roadedge (Lager-

Table III Lead and zinc concentrations at 0-2 and 2-4 cm in soils collected at various distances from streets in Halifax, N.S. area. Average Daily Traffic (ADT) are indicated. Each value is the mean of 3 replicate samples

		Macdonald Street (3,000 ADT)		Cole Harbor Road (18,500 ADT)		North Park Street (16,000 ADT)		Armdale Rotary (50,000 ADT)	
	Meters	0-2 cm	2-4 cm	0-2 cm	2-4 cm	0-2 cm	2-4 cm	0-2 cm	2-4 cm
LEAD µg/g d.w.	0	465	133	858	96	1075	452	3046	96
	1	118	39	402	32	457	—	2813	250
	5	32	20	177	45	136	70	342	173
	15	26	20	75	39	163	58	—	—
	20	—	—	—	—	—	—	223	26
	30	26	26	45	39	63	57	—	—
	50	38	32	45	45	95	70	223	96
	100	210	205	—	—	60	26	—	—
	background	14)							
ZINC µg/g d.w.	0	106	85	422	93	272	166	880	57
	1	69	68	198	50	167	—	700	99
	5	75	59	122	47	79	69	144	89
	15	59	56	55	56	92	65	—	—
	20	—	—	—	—				
	30	65	58	63	61	—	—	150	36
	50	64	62	69	69	58	55	—	—
	100	78	68	—	—	76	64	95	59
	background	66)				60	54	—	—

werff and Specht 1970; Creason et al. 1971; Page et al. 1971; Hutchinson 1972; Ward et al. 1975; Wheeler and Rolfe 1979; Fergusson et al. 1980; and Muskett and Jones 1980).

These results are not surprising since the amount of lead emitted from cars greatly exceeds the amount of zinc emitted from tire wear (43,000 tonnes of lead versus 800 tonnes of zinc in 1972 in Canada; Anonymous 1976). It would be expected, therefore, that lead concentrations would be much higher next to the curb. Conversely, background concentrations of zinc in soils are typically higher than lead (eg. zinc 90 μg/g, lead 20 μg/g; Warren et al. 1971).

Typical background concentrations reported in the literature range from 10-20 μg/g lead in soils, 3 μg/g lead in vegetation, 90 μg/g zinc in soils, and 15-200 μg/g in vegetation (Warren et al. 1971; Hutchinson 1972; Peterson 1978; and Freedman and Hutchinson 1981).

Table III is a presentation of lead and zinc concentrations in the soils at 0-2 and 2-4 cm depths. Both lead and zinc are more highly concentrated in the first 2 cm. It can be seen that the difference between upper and lower depths is greatest at sites closer to the road. As the distance from the road increases, the upper and lower concentrations are more similar. This can be interpreted in view of the observation that, as distance from the road increases, less metal is deposited, and thus the soil concentrations approach background values. Thus, the surface layer near the road is much more highly contaminated than the lower layer. These results are similar to findings published elsewhere, some of which measured metals to a depth of 50 cm (Lagerwerff and Specht 1970; Hutchinson 1972; Ward et al. 1977; Fergusson et al. 1980; Gulson et al. 1981).

An increased burden of lead and zinc has been demonstrated in soils and vegetation near streets in Halifax. Although both metals are highly concentrated within 15 m of the roads, there is no apparent damage to vegetation. Since soil lead is only slightly taken up by roots and subsequently translocated in plants (Marten and Hammond 1966, cited in Lagerwerff and Specht 1970; Page et al. 1971; Hutchinson 1973b), it is evident that the bulk of the excess metal burden in plants is due to aerial deposition. Even so, as of 1973 there had been no clear cut cases of plant damage due to automobile emitted Pb (Hutchinson 1973b). Thus, it seems that the effects of roadside lead and zinc contamination on vegetation are not critical. Generally, the most highly contaminated zones on either side of heavily travelled roadways are unproductive with respect to agriculture, and do not support an ecologically critical habitat (note, however, that in at least one case, the death of large herbivores due to grazing lead-contaminated roadside areas has been documented (Rabinonitz and Wetherill 1972), indicating the possibility of problems when mammalian herbivores are allowed to graze roadside vegetation).

The subject which remains of greatest concern to man is the health hazard of roadside metal pollution for people, especially young children. This is understandable since lead is a potential neurotoxin, and roadways with high traffic volumes are frequently associated with high population densities (eg. busy streets in major cities). Dwellings are often located within 5 m of roadedges, the zone with the highest metal concentrations in both street dust and air. Many studies have investigated the effects of this source of metal pollution on people, and a recent paper provides a good discussion concerning lead (Stephens 1981). The most thorough study to date has been that of Needleman et al. (1979). They used the dentine lead levels of milk teeth as an index of dose, and measured psychologic performance in 158 Boston children. The results, which were widely accepted in the literature, revealed that children with high dentine lead levels performed significantly less well on a range of tests than children with low dentine lead levels.

While the results of the study by Needleman et al. are alarming, recent findings indicate that automobile lead emissions are declining. Hoggan et al. (1978) reported a 50% decrease in Los Angeles atmospheric lead particulates from 1971 to 1976, and similar observations have been made in Canada (Anonymous 1981). On a national scale in the United States, automobile lead emissions in 1980 were half of the 1975 emissions (Anonymous 1980). Similarly, during a four year study at Hubbard Brook, New Hampshire, (1975 to 1979) the mean annual lead input to forest soils decreased each year (Smith 1981). In each of these studies the decrease was tentatively attributed to the increasing use of non-leaded fuels. With the installation of catalytic converters on many cars built after 1973 (as a control for certain gaseous emissions), it became necessary to use non-leaded fuel because lead was shown to inactivate the platinum catalyst in the converters.

In summary, it has been shown that both lead and zinc concentrations in soils and vegetation are related to traffic density and the proximity of the road. Lead and zinc concentrations in soils are inversely related to depth.

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ARSENIC POLLUTION ASSOCIATED WITH TAILINGS AT AN ABANDONED GOLD MINE IN HALIFAX COUNTY, NOVA SCOTIA

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Arsenic concentrations have been determined in tailings and vegetation at an abandoned gold mine in Nova Scotia. Arsenic in tailings was very heterogeneous, with concentrations ranging from 0.12% to 7.2%. Several plant species had elevated arsenic concentrations, especially *Juncus tenuis* (834 μg/g), *Equisetum fluviatile* (538 μg/g), and *Agrostis tenuis* (579 μg/g). In laboratory bioassays using tomato, radish, and bean plants, there were significantly lower rates of growth in plants grown in tailings than those grown in sand. The addition of nutrients to the tailings did not alleviate this toxicity. Tolerance to tailings decreased as follows: radish $\geqslant$ tomato $>$ beans. Fish caged in a contaminated brook at the tailings site accumulated significantly more arsenic over a four week period than did unexposed fish.

Les concentrations en arsenic ont èté measurées dans les débris de minerai et la vegetation sur le site d'une mine d'or abandonee de la Nouvelle-Ecosse. L'arsenic dans les débris etait très hétérogènes, les concentrations variant de 0.12% à 7.2%. Plusieurs espèces vegetales, particulièrement *Juncus tenuis* (834 μg/g), *Equisetum fluviatile* (538 μg/g), et *Agrostis tenuis* (579 μg/g), avaient des concentrations en arsenic élevées. Au cours d'experiences de laboratoire effectuées sur des tomates, des radis et des haricots, les toux de croissance des plantes cultivées sur les débris de minerai etaient significativement moins élevés que ceux des plantes cultivées sur du sable. L'addition de sels nutritifs aux débris n'a pas alivúe cette toxicité. La tolerance aux débris décroit comme suit: radis $\geqslant$ tomate $>$ haricot. Des poissons maintenus en cage dans un ruisseau contaminé situé sur le site des débris ont accumulé, d'une facon significative, plus d'arsenic que ne le firent des poissons non exposés.

Introduction

Arsenic is ubiquitous, existing naturally in the atmosphere, soils, rocks, water, and in plants and animals. Inputs of arsenic to the environment occur from many sources, both natural and anthropogenic. Much of this arsenic eventually reaches sinks, such as soils and sediments. Until this final sequestering of arsenic occurs, the biological world can be subjected to its toxic effects.

The mining and processing of various minerals can release arsenic to the environment in large quantities. In Nova Scotia many former gold districts are littered with rock heaps and tailings dumps contaminated by arsenopyrite. Previous studies of these sites have been concerned mainly with possible epidemiological effects and well water contamination. Recently, Brooks et al. (1982) reported a broader study which included the analysis of stream waters, sediments, aquatic organisms, and riverbank vegetation in the Montague Gold Mining District, Nova Scotia. The present report is a continuation of this study, with an emphasis on contamination of terrestrial vegetation, toxicity of tailings, and accumulation of arsenic by fish.

Study Site

The study site was in the Montague Gold District, near the city limits of Dartmouth, Halifax County, Nova Scotia, 7 km from the Atlantic Ocean (44° 42′ N, 63° 31′ W; 61 m above sea level. Fig 1). Samples were collected at various sites on the tailings disposal area and from Mitchell Brook. This study area was chosen because: i) tailings at this and many other abandoned gold mines in neighbouring

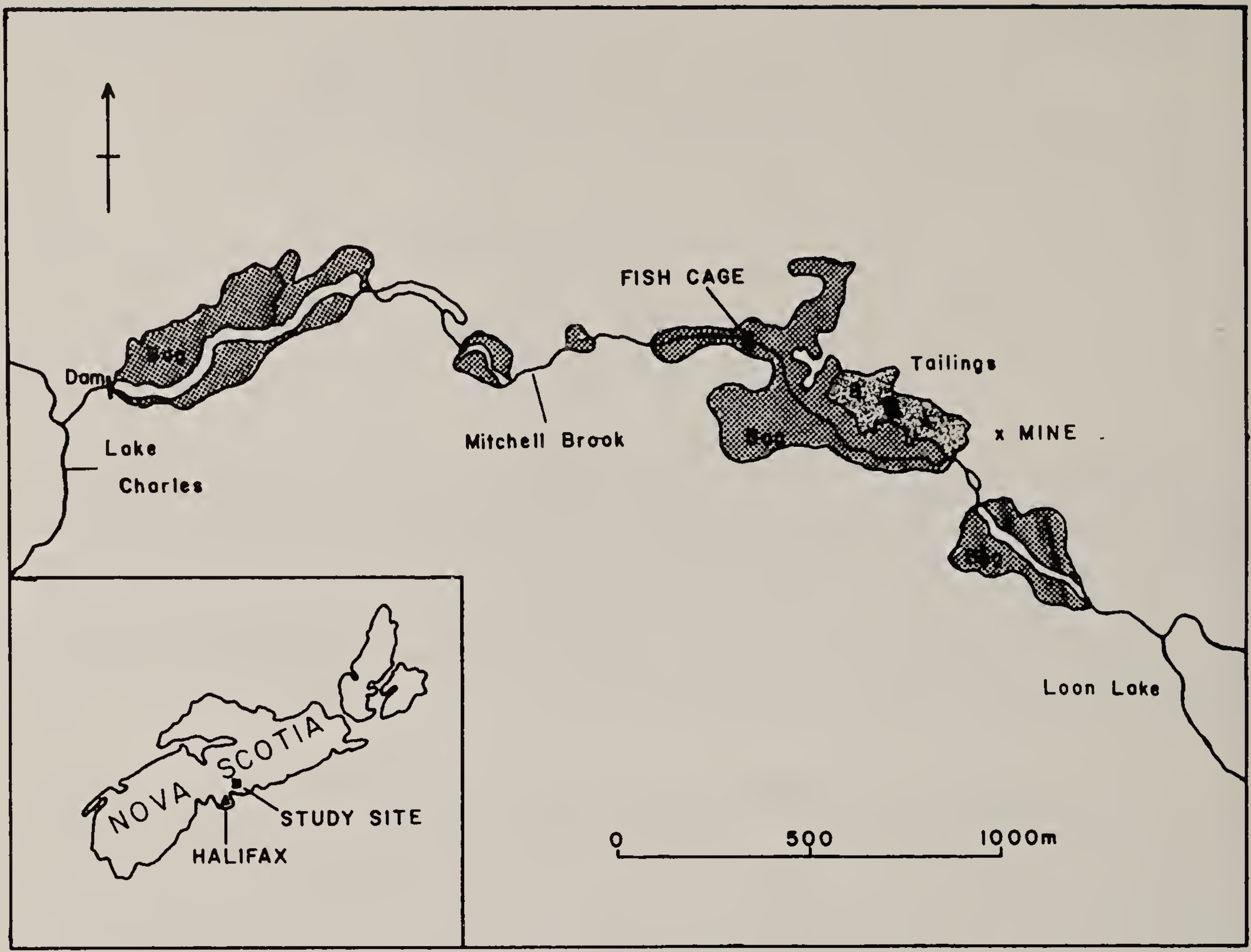

Fig 1 Montague Gold Mine District, Nova Scotia.

gold districts have been linked with arsenic contamination of well water (Briscoe et al. 1976; Grantham and Jones 1976), ii) a previous study at Montague revealed tailings concentrations of up to 1% arsenic, and brook water concentrations that exceeded 0.05 ppm arsenic (Brooks et al. 1982), the value established by Canadian Health officials as the maximum permissible limit for drinking water, iii) fish in Mitchell Brook have been shown to have elevated levels of arsenic (Brooks et al. 1982), and iv) children use the tailings flats as recreational areas.

Geology

The area is underlain by the 9,000 m thick metasedimentary Meguma Series of rocks of Ordovician Age (400 million years old). This triangular-shaped series covers much of southern Nova Scotia, with the apex at Canso and the base running from Shelburne to Yarmouth. It consists of two formations: the upper Halifax Formation (4,000 m) and the lower Goldenville Formation (5,000 m). The Halifax Formation is composed mainly of soft graphitic and ferruginous slates, and minor quartzite. The Goldenville Formation is mainly metagraywacke, with feldspathic quartzite and minor slates (Thompson 1978). It is thought that after the Meguma Group had been deposited and buried, quartz veins formed from silica rich solutions released during regional metamorphism. These veins contain large amounts of arsenopyrite (AsFeS) in association with gold. Gold also tended to concentrate near the crests of anticlines in bedding planes and fissures (Grantham and Jones 1976). Subsequent erosion removed the crests exposing the lower Goldenville Formation and the quartz veins (Thompson 1978). In addition to gold and arsenopyrite, these veins contain other minerals, including carbonate, iron pyrite, and pyrrhotite (Anonymous 1978b).

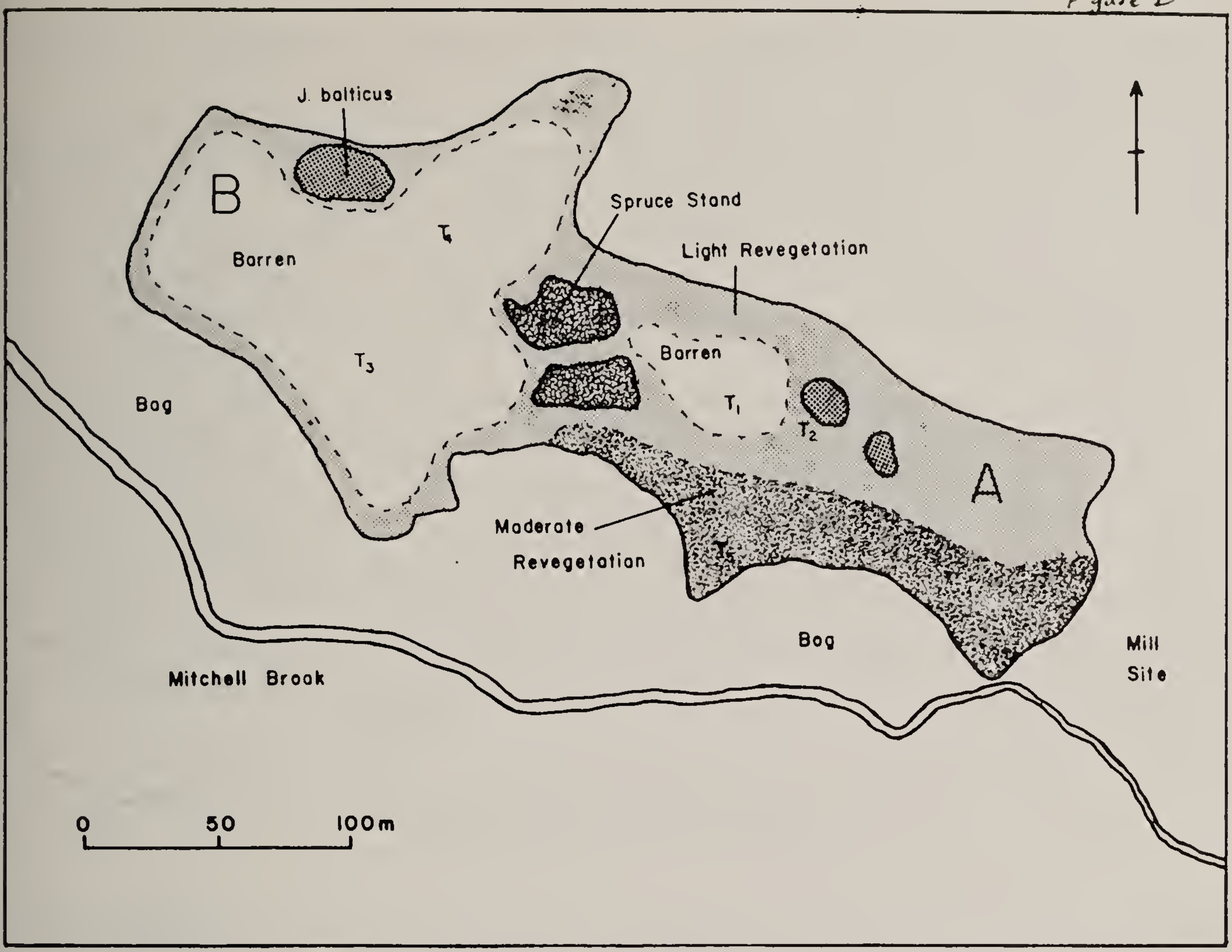

Fig 2 Tailings flats at Montague. Sample sites are indicated.

Topography and Vegetation

Montague is located in the headwater region of the Shubenacadie River, an area with approximately 70 lakes and ponds, and with streams and rivers interlaced between many low hills and ridges (Anonymous 1978c). The mine area is covered by surficial soils derived from glacial till, and generally about 2 m in thickness. This overlies a substrate of either Halifax or Goldenville rocks (Johnson 1978).

Loon Lake (73 ha) is upstream from the mine site, and it drains into Lake Charles via Mitchell Brook (Fig 1). The brook course includes stretches of fast-moving waters, still waters, and diffuse drainages through bogs over its 3.5 km length. The average gradient is 11 m/km.

The study area is surrounded by a mature fir and spruce-dominated forest. Downslope from the old mine shafts and mill the land opens onto a flat area bisected by Mitchell Brook, with the tailings flats (designated A and B, Fig 1) on the north side, and the bog on the south.

The tailings flats (Fig 2) comprise an area of roughly 3.5 ha. Flat B is virtually barren except for a small area of *Juncus balticus.* Flat A is better vegetated, mainly with *Juncus balticus, Juncus tenuis, Equisetum fluviatile, Equisetum arvense, Leontodon autumnalis, Aster lateriflorus, Centaurea nigra, Agrostis tenuis,* and several additional grass and herb species.

History of Development

The gold mining industry was established in Nova Scotia during the 1860's, shortly after the California Goldrush infused gold fever into the North American population. A total of 65 official gold districts were proclaimed by the provincial government, and one of the most significant of these was Montague. During the years 1860 to 1939, 122,000 tonnes of ore were crushed at Montague, yielding 1.9 x 10^6 g of gold (Anonymous 1978b).

During the mining process the gold-bearing rock was brought to the surface from several mine shafts. At the surface the rock was crushed to a sand size, and this was then subjected to a mercury amalgamation extraction of the gold (Anonymous 1978b). The remaining waste, high in arsenopyrite content, was then sluiced downslope as a slurry into the bog and stream, creating the tailings flats A and B (Fig 2). These two areas resulted from different periods of operation. Area A was created from 1860 until after the turn of the century. During this time the tailings were sluiced directly into the stream as well as adjacent to it, altering the course of the channel. At periods of peak activity the iron released formed a precipitate ($Fe(OH)_3$), which was desposited on the stream bottom, and also created a froth on the water surface that coursed downstream into Lake Charles. This created a recreational nuisance for bathers and also threatened water quality, until the city of Dartmouth put a halt to the practice. The mining company was then forced to sluice the tailings beyond Area A into Area B and not directly into the stream. This area includes deposits made up until 1939 when the mine ceased operation (personal communication with Gerald Cooper, local resident).

Materials and Methods

(i) Plant Collections: Eight different plant species representing the dominant community members on the tailings flats were collected during August, 1981 (n=5 plants in all cases) from several designated areas (T_1, T_2, T_3, T_5; Fig 2). These were dried at 65°C for 48 h, and dry weights were determined to the nearest 0.1 mg. They were then ground using a Wiley Mill and stored in paper envelopes. Subsamples of 0.5 g were placed in 50 ml acid-washed digestion tubes. They were then predigested in 5.0 ml of concentrated nitric acid for two h at room temperature (21°C). The digestion tubes were then placed into aluminium heating blocks, and digested on a hotplate at 100°C for two h. The digest was vacuum filtered and made up to 20 ml with distilled-deionized water. These samples were then stored in plastic vials for later analysis.

(ii) Tailings Collections: Soil pits were dug at sites T_1, T_2, T_3, T_4, T_5 (Fig 2) to the depth of the water table (20-30 cm). Plastic vials (20 cm^3) were pressed horizontally into the sides of the pit (3 per interval) at depths from 0-30 cm at 3 cm intervals. Wet weights and pH were determined in the lab. The samples were then air dried, and dry weights were determined. Subsamples of approximately 0.5 g were digested using the method described above for plants. Filtered digests were diluted to 20 ml and stored in plastic vials for later analysis.

Several filter papers from both the plant and tailings digests were removed after filtration and were digested in the above manner to determine the efficiency of As recovery.

(iii) Fish Caging Experiments: The exposure cage was constructed of 0.6 cm mesh galvanized screening coated with polyurethane. The cage was cylindrical, with a height of 80 cm, and a diameter of 60 cm. The cage was open on the bottom, and had a removable screen top.

Approximately 50 Banded Killifish (*Fundulus diaphanus*) were collected with dip nets from Dingle Pond, located 2 miles SW of Halifax. These were immediately transported to the lab in pails of pond water. For later identification the left pelvic fin was removed from each fish. A group of 10 fish was killed, wet weights were determined and then they were frozen. A second group of 10 fish was taken to the study site and placed into a cage. This cage was located in Mitchell Brook downstream from tailings area 2 (Fig 1), in a section of the stream previously determined to have the highest As concentration in the water (140 μg/g) (Brooks et al. 1982). The cage was sunk into the sediment in a water depth of approximately 30 cm. The caged fish were left for four wk during August, 1981. After this exposure period, the fish were taken to the lab, killed, weighed, and frozen. Later, all fish were thawed and predigested in 100 ml beakers containing 20 ml of a 1:4 nitric-perchloric acid solution. These were fumed to dryness on a hotplate, and the residues were redissolved in 5 ml of 2M nitric acid. These were then analyzed for arsenic content.

(iv) Arsenic Analysis: All samples were analyzed for arsenic using a Perkin Elmer 2380 Atomic Absorption Spectrophotometer with an attached MHS-10 hydride generating system and an electrodeless discharge lamp. The 197.3 nm line was monitored, using a slit width of 0.7 nm and an air acetylene flame. A solution of 1% NaOH and 3% $NaBH_4$ was used as the reductant. Microliter aliquots of sample were introduced into the reaction flask, which contained 10 ml of 1.5% HCl. The arsine (AsH_3) generated was measured in a heated quartz crystal over the flame. A Varian single channel, multispan chart recorder (model G-2010) set at 10 mv was used to measure and record peak height. The range of standards was 10, 20, 25, 50, 75, and 100μl of a 1 μg/g standard solution of As (made from Fisher AA grade 1000 μg/g As standard). These corresponded to 10, 20, 25, 50, 75, and 100 ng of As. Dilutions were made where appropriate so that all sample peaks fell within this range.

Standard reference orchard leaves (No. 1571, U.S. National Bureau of Standards) were analyzed to check accuracy. In addition, as a further check on accuracy, several samples were analyzed by neutron activation at the Slowpoke facility at Dalhousie University. The results of these analyses are summarized in Appendix 1.

(v) Plant Bioassays: Bioassays were made using three crop species; tomato (Beefsteak), radish (Early Scarlet Globe), and beans (Round Pod Kidney Wax). These represented tolerant, intermediate, and intolerant species respectively, in terms of arsenic toxicity (Woolson 1973; Anonymous 1978a). Thirty plants of each species were grown in control sand (C), tailings No. 1 (T_1), and tailings No. 3 (T_3), and each of these was further divided into 10 plants each of no nutrient addition, low nutrient addition, and high nutrient addition.

Six cm plastic pots with filter paper on the bottom were filled with similar volumes of each soil type. These pots were watered with the various nutrient solutions using 25 ml plastic graduated cylinders, and were then allowed to stand for 2 d. Nutrient treatments were as follows: i) no nutrient—25 ml of tap water every day; ii) low nutrient—6 g of a 20-20-20 fertilizer in 4 liters of tap water, 25 ml of this solution every 5 d interspersed with 25 ml of tap water; iii) high nutrient—same as low nutrient except 24 g of fertilizer in 4 litres of tap water.

Three seeds each of tomato and radish or two bean seeds were sown per pot. Pots were randomized to eliminate position effects, and they were placed in a Conviron controlled environment growth chamber with a 16 h photoperiod, a temperature range of 20-22°C, and light intensity of 1000 microeinsteins m^{-2} sec^{-1} (cool white fluorescent lamps; intensity was measured at pot height). Seeds were allowed to germinate, and when they were firmly established the smallest plants were cut back leaving one plant per pot. Germination was 100% for controls of all species.

The experiment was terminated at 25 d. Plants were then cut at the soil:air level and were dried for 48 h at 65°C. Dry weights were determined to the nearest 0.1 mg.

Table I Arsenic concentration (μg/g d.w.) in various plants collected from tailings flats at Montague Mines (T_1, T_2, T_3, and T_5). Controls from Dingle Park, N.S.. Each value is the mean of 5 composite plant samples

			SITE		
Species	T_1	T_2	T_3	T_5	Control
Leontodon autumnalis	-	211	-	53	6
Centaurea nigra	252	101	-	16	2
Juncus balticus	28	11	20	18	2
Juncus tenuis	108	82	44	-	3
	-	-	59	-	-
	-	-	834	-	-
Aster lateriflorus	65	19	20	34	0.5
Equisetum fluviatile	-	463	-	178	2
	-	538	-	-	-
Equisetum arvense	210	143	131	170	1
Agrostis tenuis	282	578	134	13	1

Results and Discussion

i. *Plant Community:* Table 1 shows the arsenic concentrations of plants collected from up to four sites in the tailings area, and from an uncontaminated site at Dingle Park, N.S. In almost all cases plants from the tailings area were an order of magnitude higher in As concentration then controls, and in most cases two orders of magnitude. All control values are similar to those reported for uncontaminated vegetation in the literature (Porter and Peterson 1975; Girling and Peterson 1978).

These findings of high concentrations of As in plants are not surprising. A number of plant species have been shown to accumulate large amounts of various metals when growing on contaminated sites (e.g. Freedman and Hutchinson 1981). The same has been shown for arsenic by various authors. For example, up to 10,000 μg/g As (ash wt.) has been found in Douglas Fir needles in B.C. (Warren et al. 1964, cited in Porter and Peterson 1975).

Three samples of *Juncus tenuis* (5 plants/sample) from T_3 had arsenic concentrations of 44, 59, and 834 μg/g. As well, two samples of *Equisetum fluviatile* (5 plants/sample) from T_2 were determined to have 463 and 538 μg/g. These differences within species are likely a reflection of the heterogeneity within the tailings themselves with respect to arsenic.

It has been shown that populations within a species can evolve physiological tolerances to arsenic (Antonovics et al. 1974; Williamson and Johnson 1981). For example, Porter and Peterson (1975) measured arsenic and various other metals in plants growing on mine waste in England. Plants growing on high arsenic sites had an arsenic content that ranged from 460 - 6640 μg/g As (dry wt.), while those on low arsenic sites ranged from 0.28 - 3.0 μg/g (dry wt.). Further investigations demonstrated that material from one of the high arsenic clones of *Agrostis tenuis* was tolerant to levels of arsenic that were lethal to non-tolerant clones.

Other studies have looked at species of *Equisetum* as arsenic tolerators and accumulators (Girling et al. 1978; Brooks et al. 1981). These studies were done with the aim of investigating the contention that the *Equisetaceae* are gold accumulators, as proposed by Nemec et al. (1936). Species of *Equisetum* are generally found in damp areas, and are common on disturbed sites such as tailings

Table II Arsenic concentrations of tailings at various depths. Mean value of 3 samples. T_1, T_2 and T_5 are located in tailings flat A. T_3 and T_4 are located in tailings flat B

DEPTH	TAILINGS PIT ARSENIC (X 10^3 µg/g)				
(cm)	T_1	T_2	T_3	T_4	T_5
0-3	5.93	1.86	72.1	9.44	7.18
3-6	4.34	-	-	-	-
6-9	3.65	1.48	27.9	3.08	7.09
9-12	3.17	-	-	-	-
12-15	-	2.29	3.21	2.11	6.53
15-18	3.05	-	-	-	-
18-21	5.04	1.75	2.51	1.81	5.96
24-27	-	2.32	-	2.00	-
27-30	-	1.19	-	-	-

disposal areas around mining districts (Smith 1938). Brooks et al. (1981) sampled *Equisetum* from several gold mine tailings sites in Nova Scotia, and found a range of 41-738 µg/g arsenic in *Equisetum* compared with$<$0.5 µg/g gold. They suggested that species of *Equisetum* are indirect indicators of gold deposits, due to the high levels of arsenic which are often associated with gold deposits.

It can be seen from the data in Table 1 that *Equisetum fluviatile* had a high arsenic concentration (538 µg/g) at T_2, but that in *Agrostis tenuis* from the same site this value was exceeded (578 µg/g). Furthermore, the other values for both species of *Equisetum* were within the range of the other species. Obviously these other species are also quite tolerant of arsenic, and can accumulate large amounts.

ii. *Arsenic Content of Tailings:* The results for the tailings pit samples are in Table 2. Each value represents a mean determination of 3 composite samples from the same depth. The lowest depth in each case marked the height of the water table at that location. Surface concentrations of arsenic at T_3 were anomalously high for the area, but are comparable to tailings values reported elsewhere (eg. 50,000 ppm, Venus Mine, Yukon (Kuja 1979)). The other tailings concentrations are similar to those reported in the literature (Comanor 1974; Kuja 1979; Brooks et al. 1982).

Both T_3 and T_4 from tailings flat B had higher surface concentrations than flat A tailings. This is likely a reflection of: 1) differences in ore composition that are reflected in the tailings arsenic concentrations, 2) age of the tailings, as flat B was formed during the later period of mine operation, and did not experience as long a period of leaching, or 3) downslope leaching of arsenic from flat A to flat B.

In four of the pits there was a decrease in arsenic concentration with increasing depth. T_2 was the only pit which did not show this trend. It had the lowest arsenic concentrations of all five pits, with values averaging approximately 2,000 µg/g. This pit was located in a stand of *Juncus balticus.* It is possible that decaying organic matter from this vegetation altered the chemistry of the arsenic, resulting in no variation in concentration with depth.

The acidity of the tailings does not appear to be a significant toxic factor. For example, pH measurements at T_1 averaged 6.9, 5.9 at T_2, and 5.4 at T_3.

iii. *Fish Caging Experiment:* This experiment was prompted by results of Brooks et al. (1982), who reported that resident fish downstream from the tailings at Montague had arsenic concentrations five times that of upstream "control" fish. The experiment was designed to exclude possible migration up or downstream in order to determine uptake of arsenic over a set period of time by fish not previously exposed to such high concentrations.

At the end of the experiment the mean arsenic concentrations of the exposed and unexposed fish were significantly different ($0.010<p<0.025$). The control fish averaged 0.446 µg/g, while the fish caged in Mitchell Brook had 0.639 µg/g As wet weight. Interestingly, two resident Banded Killifish which entered the experimental cage had values of 4.77 and 4.02 µg/g As wet weight. These much higher concentrations (approximately 10x higher) reflect the longer residence times of these two fish in contaminated Mitchell Brook.

The water in the stream at the caging site contained 0.14 µg/g As (Brooks et al. 1982). While not lethal, this and lower concentrations have been shown to produce significant behavioural changes in goldfish exposed for 24 to 48 h (Wier and Hine 1970, cited in Anonymous 1978a). However, different fish species have exhibited different tolerances to arsenic. Perch exposed to 0.7 - 1.1 µg/g As for 48 d were unaffected. However, when the concentration was raised to 1.1 - 2.2 µg/g As the perch showed a toxic response. Similarly, bass tolerated 6.0 µg/g As but not 7.6 µg/g for 10 d (Luh et al. 1973). While these arsenic test levels are unusually high in comparison with natural waters, the experiments were of relatively short duration. Natural low dose exposures of longer duration will accumulate arsenic in fish tissues as well, as evidenced by the present findings. Here the question of food chain transfer arises. It is probable that some of the arsenic uptake by fish caged in Mitchell Brook occurred by ingestion of lower trophic level organisms. Similarly, larger game fish are known to enter Mitchell Brook (e.g. trout, bass). These could feed on the killifish and they would consume approximately 25 µg/g As per fish eaten (assuming an average fish weight of five grams and an arsenic content of 5 µg/g). It is not generally believed that As biomagnification occurs in aquatic foodchains (Anonymous 1978a). However, fish spending part or all of their lifecycle in

Table III Mean weight (mg d.w.) and standard deviation of vegetable crops on different nutrient treatments in tailings and control sand. N = 10 in all treatments

	NUTRIENT	CONTROL SAND		TAILINGS T_1		TAILINGS T_3	
PLANT	TREATMENT	$\overline{X}$	S.D.	$\overline{X}$	S.D.	$\overline{X}$	S.D.
TOMATO	NO	8.6	3.4	8.3	3.1	5.6	2.2
	LOW	66.0	23.3	3.0	1.8	11.0	3.2
	HIGH	63.9	20.0	<0.1	-	3.8	1.6
RADISH	NO	55.5	11.6	34.6	11.3	21.6	5.5
	LOW	125.3	23.2	57.9	17.9	56.9	16.0
	HIGH	216.7	30.1	28.7	15.1	66.6	12.1
BEAN	NO	421.4	63.5	7.2	10.1	7.6	17.5
	LOW	368.0	48.0		N.E.	4.8	11.8
	HIGH	391.8	92.2		N.E.		N.E.

N.E. no emergence from soil

contaminated streams have increased arsenic contents, and some of these fish may ultimately be consumed by people, with possible long term epidemiological effects if the fish are eaten regularly or in large quantities.

iv. *Plant Bioassay:* Results of the plant bioassay are in Table 3 and Figures 3, 4, and 5. In all cases, the control values for plant production were significantly higher ($p < 0.05$) than T_1 and T_3 tailings, except for tomato on no nutrient and T_1 tailings. The results strongly suggest a toxic element in the tailings, which is presumably arsenic. The data also indicate possible synergism between arsenic and high nutrients, e.g. nutrient additions predispose the plants to As toxicity.

Table 4 lists our data for the relative growth of experimental plants compared with the controls. These data indicate that radish was more tolerant of arsenic than tomato (contrary to Woolson 1973). Beans were the least tolerant, growing little or not at all. The bean cotyledons that managed to emerge were often distorted and shrivelled. This symptom has been observed by other researchers using beans in arsenic bioassays, and it appears to be a toxic response. Woolson (1973) made bioassays with lima beans and showed that toxic amounts of arsenic arrested the germination of the bean seeds and reduced seedling viability. The bean cotyledons which emerged turned brown, shrivelled, and died.

Arsenic lies beneath phosphorus in the periodic table, and resembles it in its chemistry. Arsenic can penetrate the plant cuticle, and it combines with sulfhydryl groups causing inhibition of enzyme activity, resulting in membrane damage (Dickerson 1980; Leonard and Lauwerys 1980). Arsenic also causes chlorosis (Foy et al. 1978). It was noted that many of the experimental radishes and beans developed chlorotic foliage after about two weeks, while only a few tomatos did so. In addition, some radish developed red margins on the leaves. None of the

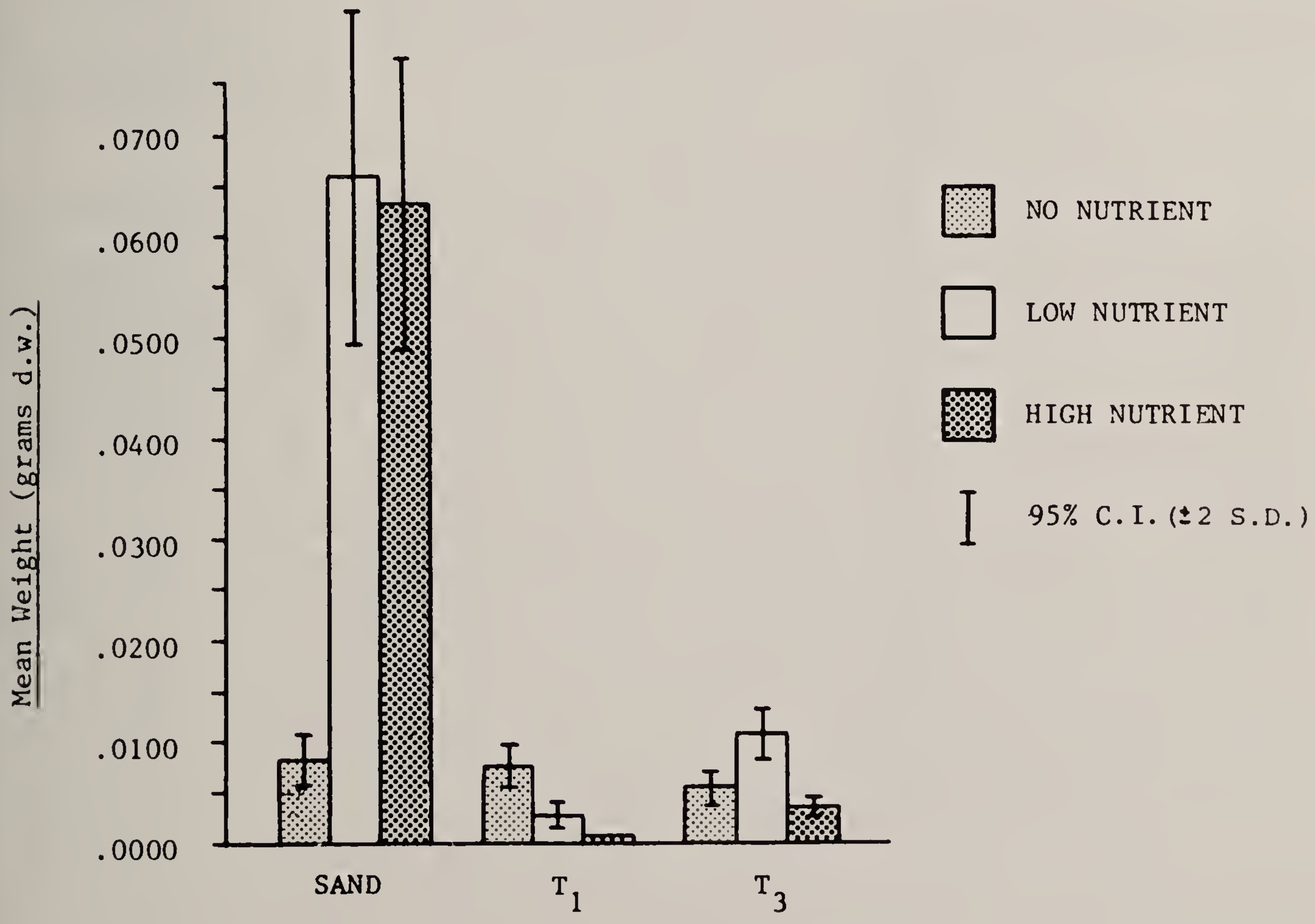

Fig 3 Mean weights (grams dry weight) of tomato bioassays grown in three different soil types with three nutrient treatments.

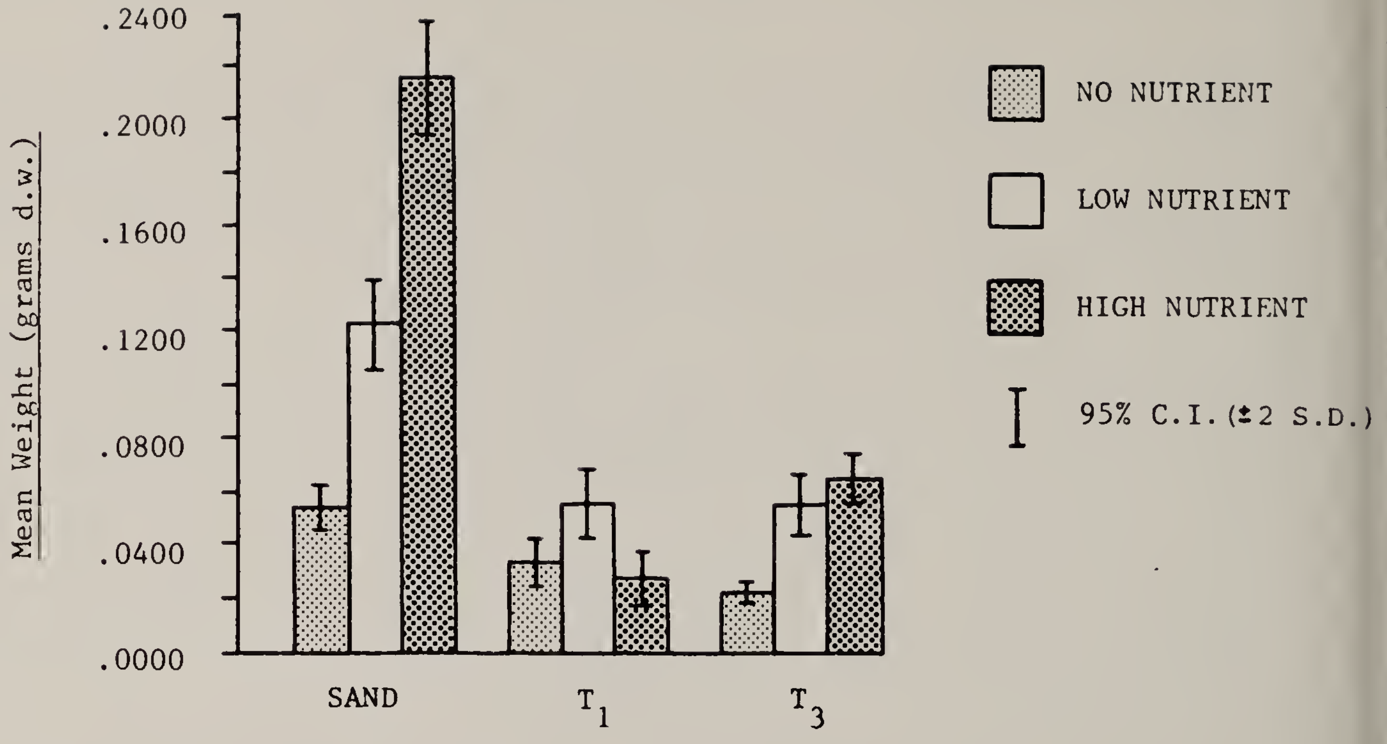

Fig 4 Mean weights (grams dry weight) of radish bioassays grown in three different soil types with three nutrient treatments.

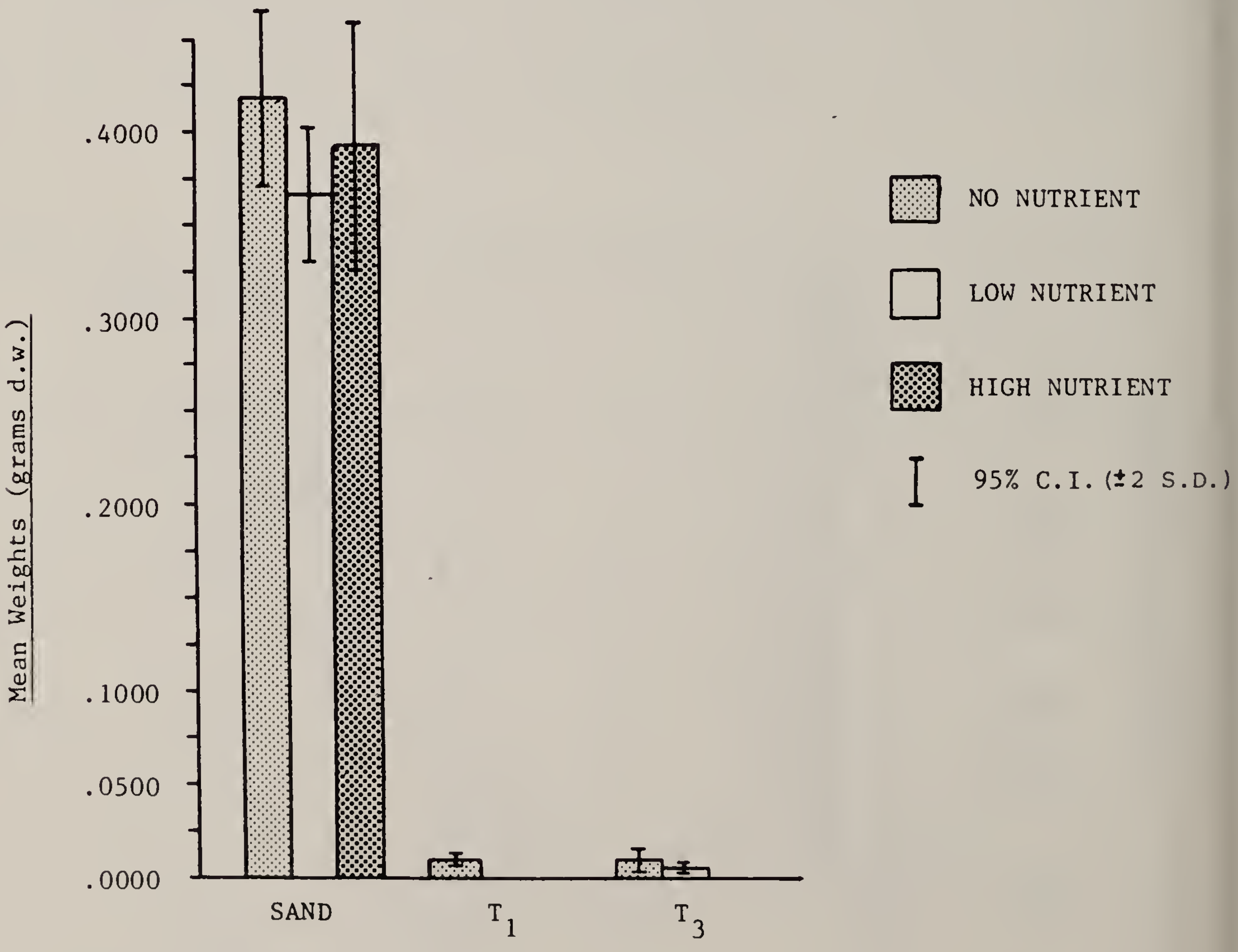

Fig 5 Mean weights (grams dry weight) of bean bioassays grown in three different soil types with three nutrient treatments.

Table IV Growth of plants in tailings, expressed as a percent of growth in control sand

PLANT	NUTRIENT TREATMENT	T_1	T_3
TOMATO	NO	97	65
	LOW	5	17
	HIGH	1	6
RADISH	NO	62	39
	LOW	46	45
	HIGH	13	31
BEAN	NO	2	2
	LOW	0	1
	HIGH	0	0

control plants had such coloration of the leaves. If the occurrence of these symptoms are used as criteria for tolerance, then tomatoes were the most tolerant.

In general, the control plants appeared to be more turgid and deeper in colour than the tailings plants. Primary leaf pairs were held more nearly horizontal, and were more similar in size and shape than in the tailings plants, especially for radishes. Also, several experimental beans dropped leaves near the end of the experiment. This decreased turgidity in experimental plants could be due to decreased uptake of water. Woolson (1973) has reported that plants stressed by arsenic are less able to transport water upwards.

Thus, the plant bioassays demonstrate that the tailings at Montague are quite toxic to non-adapted plants. However, different plants vary in their degree of tolerance to the tailings.

Summary and Conclusion

This study has examined several features of an arseniferous tailings disposal area, and some related effects on organisms. There is no doubt that the tailings are highly toxic and that they represent a large quantity of arsenic available for leaching into the ecosystem for years to come.

These tailings may be partially responsible for the wellwater contamination observed in the area (Briscoe et al. 1976). To our knowledge, the 7.2% arsenic value measured at tailings flat B is the highest value reported in the literature. Of 42 gold tailings dumps sampled in Nova Scotia (not including Montague) and analysed by Cochrain in 1921 (cited in Fralick 1980), the highest As values were 4.6% and 1.3%, with the remainder less than 1%. Most of these values were, however, based on only one sample. In addition, Murdoch and Sandilands (1978) found that, of 17 streams in the Shubenacadie headwater region, Mitchell Brook had the highest value (10 X) for arsenic in suspended solids at the outflow of Loon Lake above the tailings area. This suggests that the Loon Lake region is underlain with rocks having a higher than usual arsenopyrite content.

Even with such large amounts of arsenic these tailings are being naturally vegetated with As tolerant plants. This process eventually will build up nutrients and organic matter, which will further stabilize the site. However, this natural colonization process is slow. An alternative would be a reclamation program.

Reclamation has been successful in other areas (Williamson and Johnson 1981). If the Montague tailings were reclaimed, human exposure to arsenic would decrease, especially to children who now play in the tailings area. In addition, reclamation would improve the esthetics of the area, and would generally tend to stabilize the tailings with respect to erosion and dust-blown material.

Aside from the direct exposure to tailings and intake of contaminated well water, the possibility of ingestion of contaminated fish exists for local residents. We are unaware of any studies that have investigated the effects on humans of eating fish contaminated with arsenic. However, Utidjian (1974, cited in Anonymous 1978a) reported that humans ingesting lobster tails with high arsenic levels had elevated urine excretion rates of 0.78-1.68 μg As/l of urine, compared to a normal value of 0.01-0.05 μg/l, and that 2 d were required for the normal rates to return. Several researchers have reported that as little as 0.15-3.3 mg As ingested per day (long term) caused chronic poisoning (Anonymous 1978a). Thus, ingestion of fish may be important, and game fish from Mitchell Brook should be analysed for arsenic content.

Finally, it would be prudent to control existing or future mining operations in the area with respect to the dumping of tailings, and with particular regard to problems associated with contamination of groundwater. This conclusion has been reached by previous researchers (Arsenic Task Force in Nova Scotia; Grantham and Jones 1976), and is merely reiterated here.

Acknowledgements

We thank O. Maessen, N. Macnee, and F. Tanguay for their assistance in the lab and field. Dr. D.E. Ryan of the Trace Analysis Research Centre of Dalhousie University analyzed several samples by neutron activation. This work was supported by research grants from the Natural Sciences and Engineering Research Council of Canada, and the Dalhousie University Research Development Fund.

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Appendix

Comparison check on analytical accuracy of Atomic Absorption by Neutron Activation using standard reference material and representative samples. Result of filter paper digestion for check on recovery of arsenic by vacuum filtration

Sample	Atomic Absorption µg/g As	Neutron Activation µg/g As	
Standard Orchard Leaves	14 (14)*	13 (14)*	
Tailings T_3			
Digested	72000	60000	3000
Undigested		64000	12000
Banded Killifish	0.77	0.5	0.2
E. fluviatile	462	470	
Filter Paper	0		

*certified value for reference material

PROCEEDINGS OF MEETINGS
1981-82

HALIFAX CHAPTER

1st Extraordinary Meeting, 2 Oct. 1981 (jointly with the Atlantic Geoscience Society)

"The Voyager Mission—Moons of Jupiter". G. Ramsford, Jet Propulsion Laboratory, Pasadena.

1st Ordinary Meeting, 5 Oct. 1981

Tour of the Fisheries Research and Technology Laboratory, Technical University of Nova Scotia. E.G. Bligh, TUNS.

2nd Ordinary Meeting, 2 Nov. 1981

"Some Mathematics Used to Develop a New Method of Shipbuilding in Nova Scotia". J. Clements, Dalhousie University.

3rd Ordinary Meeting, 7 Dec. 1981

"Vagaries of Forecasting the Weather in the Maritimes". N. MacLennan, Maritimes Weather Office, Bedford.

4th Ordinary Meeting, 4 Jan. 1982

"Wine-making—a Viable Industry for Nova Scotia?". R. Dial, Dalhousie University.

5th Ordinary Meeting, 1 Feb. 1982

"Off-Shore Development and Environmental Assessment". Panel Discussion: C.W. Ross, Mobil Oil Canada Ltd.; P. Duinker, Dalhousie University; W. Heber, Dalhousie University; R.J. Conover, Bedford Institute of Oceanography (for D.J. Scarratt, Fisheries and Oceans, St. Andrews, N.B.).

6th Ordinary Meeting, 1 Mar. 1982

"Applications of Chemistry to Efficient Production of Metals". H. Bell, University of Strathclyde, Glasgow.

7th Ordinary Meeting, 5 Apr. 1982

"How to Protect Watershed Lands for Municipal Water Supplies". D.H. Waller, Technical University of Nova Scotia.

8th Ordinary Meeting, 3 May 1982 (jointly with the Valley Chapter, at Acadia University)

"Sea Slugs and the South Pacific". J.S. Bleakney, Acadia University.

VALLEY CHAPTER

1st Ordinary Meeting, 6 Oct. 1981

"New Developments in Food Processing and Storage". R. Stark, Agriculture Canada, Kentville.

2nd Ordinary Meeting, 3 Nov. 1981

"Pyrolysis—a New Analytical Tool". E.R. Hayes, Acadia University.

3rd Ordinary Meeting, 30 Nov. 1981

"Programming Strawberries to Multiply". N.L. Nickerson, Agriculture Canada, Kentville.

4th Ordinary Meeting, 12 Jan. 1982

"The Ecology and Rickettsial Epidemiology of the American Dog Tick". T.B. Herman, Acadia University.

5th Ordinary Meeting, 1 Feb. 1982

"The History of Lowbush Blueberry Production in the Maritimes". I.V. Hall, Agriculture Canada, Kentville. "The Selected Clone and Seedling Aspect of the Lowbush Blueberry Industry". C.R. Blatt, Agriculture Canada, Kentville.

6th Ordinary Meeting, 23 Mar. 1982
"The Tokamak Fusion Energy Gamble". C.S. MacLatchy, Acadia University.

7th Ordinary Meeting, 3 May 1982 (jointly with the Halifax Chapter, at Acadia University)
"Sea Slugs and the South Pacific". J.S. Bleakney, Acadia University.

THE PRESIDENT'S REPORT

The Nova Scotian Institute of Science, the second oldest and one of the most prestigious scientific societies in Canada, was founded in 1862 for the promotion of scientific research through the holding of meetings and the publication of proceedings. In 1865 the Institute began the exchange of its proceedings for those of other scientific societies around the world and the journals received formed the basis of the Institute's library. These three aspects, the meetings, publications and library have constituted the programs of the Institute during its 120 years of continuous operation.

The program of meetings during the past year consisted of one joint meeting with the Atlantic Geoscience Society and eight ordinary meetings. At the joint meeting, held at Dalhousie University, Dr. G. Ramsford of the Jet Propulsion Laboratory, Pasadena, gave a lecture on the investigation of the moons of Jupiter and Saturn. At the eight ordinary meetings, most of which were at the Nova Scotia Museum, the speakers presented a wide range of topics. Summaries of these lectures and of the panel discussion on Environmental Impact Assesment are to be published in the Proceedings. The Institute is grateful for these contributions and for the meeting room facilities provided by the Nova Scotia Museum.

The publication program has continued to develop under the guidance of the Editor, Dr. J. McLachlan, his assistants Miss C. Bird and Dr. G.C. Milligan and members of the Editorial Committee. Dr. McLachlan resigned as Editor in February and the Council appointed Dr. G. Hicks as Interim Editor. The Institute is very conscious of the enormous amount of work that has been done by this group.

The main project of the year has been the preparation of the book "Geological Background and Physiography of Nova Scotia" by Dr. A.E. Roland for publication by the Institute on behalf of the Nova Scotia Museum. The museum has provided most of the funding as it will receive all revenues from sales. This publication is a significant venture for the Institute as it makes available an important educational text that will be widely used in schools and colleges. Parts 1 and 2 of Volume 31 of the Proceedings were published early in the year, but progress on Parts 3 and 4 has been delayed by preparation of the book.

In November of 1981 the Board of Governors of the Nova Scotia Museum agreed to allow the sale of special publications of the Institute at the Museum Information Centre. These publications are available through the Dalhousie Science Library but this action has made them more accessible to the general public.

The library of the Institute is its greatest asset. As mentioned previously the library, which is housed at the Science Library, Dalhousie University, was formed on the basis of the journals received in exchange for the Proceedings. These exchange agreements currently contribute 232 titles to the holdings of the Science Library and a further 136 titles held in storage and not catalogued as part of the Science Library holdings. This program, based entirely upon the value of the proceedings as an exchange item, makes at least $10,000 worth of published material available to the people of Nova Scotia and has made the province known throughout the world. I would like to thank the librarian, Miss E. Campbell and the staff of the Dalhousie Science Library, particularly Mrs. H. MacMillan, for the work that they have done.

The administrative aspects of the Institute have proceeded reasonably well although the slow start to the fall program and the lack of communication with the valley chapter are regretted. There were four Council meetings and several informal meetings to deal with the program and other matters. In view of the increase in cost of postage and preparation of meeting notices, the Council has decided to cut the number of notices for ordinary meetings to two, one for the fall and one for the winter program. It is hoped that the established tradition of meeting on the first Monday of the month, coupled with a reminder on the morning radio will maintain an acceptable level of attendance.

Last year it was recommended by the Provincial Government that the Institute change its annual application for funding of the Proceedings from the Provincial Grants Committee of the Department of Finance to the Nova Scotia Museum. This grant is expected to cover the cost of publication of one issue of the Proceedings. At present one issue is supported by local universities and two by the Federal Government.

Finally, I would like to thank my colleagues on the Council for the work that they have done throughout the past year and wish the Institute continued success in the year ahead. It has been both an honour and a pleasure for me to have been President.

D.S. Davis.

ACKNOWLEDGEMENT

Publication of the *Proceedings* is supported in part by grants from the Natural Sciences and Engineering Research Council, Acadia University, Dalhousie University, St. Francis Xavier University, Technical University of Nova Scotia and the Province of Nova Scotia.

INSTRUCTIONS TO AUTHORS

The *Proceedings of the Nova Scotian Institute of Science* publishes the proceedings of the Institute and original articles, including notes, pertaining to the natural sciences of the Atlantic Provinces, especially in biology and geology. Manuscripts may be either in English or French, and acceptance for publication is based on recommendations of referees.
Manuscripts should be typewritten, double-spaced on white paper 21.5 by 28 cm (8.5 by 11 in) with margins of 4 cm (1.5 in). Underline only material to be set in italics, and use capital letters only when letter or words should appear in capitals in the printed paper. Layout and style should follow that used in this volume. The original copy and one duplicate are required. Each page of the manuscript should be numbered, the first page carrying only the title, authors' names and affiliations, and any necessary footnotes.

Spelling should follow that of **Webster's Third New International Dictionary**, and authors are responsible for consistency in spelling.

Abbreviations, nomenclature, and symbols for units of measurements should follow international recommendations. Metric units, SI units and decimals should be used whenever possible. Use day/month/year sequence for dates. Do not use periods after such abbreviations as "mm, kg, DOE, NRC, etc."

Taxonomic keys should be in aligned-couplet form in zoology and paleontology, and in multi-level indent form in botany. Synonomy in botany, zoology, and paleontology should be in the short form - taxon, author, year: page - with full citation in the references.

An abstract of not more than 200 words should precede the body of the text. This should be followed by an introduction, methods, results or observations, discussion, and references. In some cases a combination of these sections may be more effective.

References should be checked with the original article and referred to in the text by author and date, in parentheses. References should be listed alphabetically at the end of the manuscript. Reference to papers in periodicals must include author, date, title, journal, volume number, and inclusive pagination. Serials are abbreviated in the form given in **Bibliographic Guide for Editors and Authors** (the American Chemical Society, 1974). For serials not found therein, the abbreviated name in the **World List of Scientific Periodicals** (Butterworths, 1963) is used. The following are examples of style for references from journals, books, and symposium volumes:

Author, A.N. and Other, T.H.E. 1978. Title of the article. *Name of Journal,* (Volume) 99: 1-10 (Omit word volume)
Author, A.N. and Coauthor, A. 1978. *Full Title of Book*. Publisher, City.
Author, A. 1978. Title of Article. In *Title of Book or Symposium Volume*. (ed. J. Smith and B. Jones). Publisher, City, pp. 256-301.

Tables should be numbered with roman numerals, having a brief title, and referred to in the text. Vertical rules should not be used. Talbes must be typed separately from the text on individual pages.

Originals of illustrations should not be more than three times the size of the final reproduction, 11 by 18 cm. Figures, including those in plates, are numbered consecutively in arabic numerals, and each referred to in the text. Original drawings, and one set of clean copy, are required and should be made with india ink on white paper. All lines must be sufficiently thick to reproduce well, and letters and characters sufficiently large to be legible and not less than 1 mm high when reduced. Captions for illustrations should be typed separately from the text.

Photographs should be mounted on heavy bristol board, and ready for reproduction. Prints must be of high quality on glossy paper with no space between those mounted in groups. Photographs of poor quality will be rejected and this, in turn, may require extensive revamping of the ms.

Color illustrations will be accepted at the discretion of the Editor. However, the cost of color reproduction is borne by the authors who must submit a statement accepting this responsibility.

Authors are responsible for editing the galley proof. Orders for reprints, in addition to the 15 supplied gratis, must be received when the galley proof is returned.